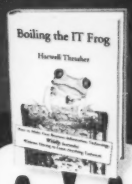

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The Fixers

Three turnaround CIOs tell how they get troubled IT groups back on track – fast.
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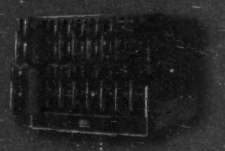

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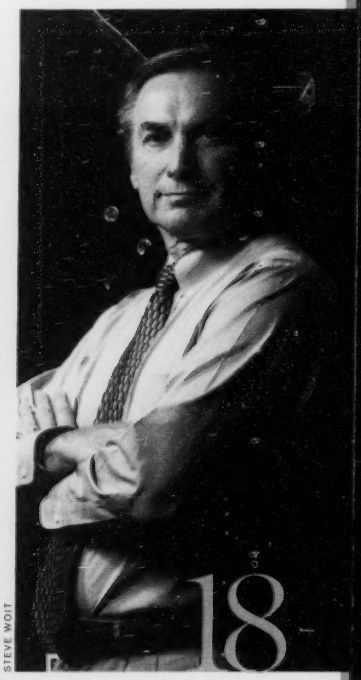

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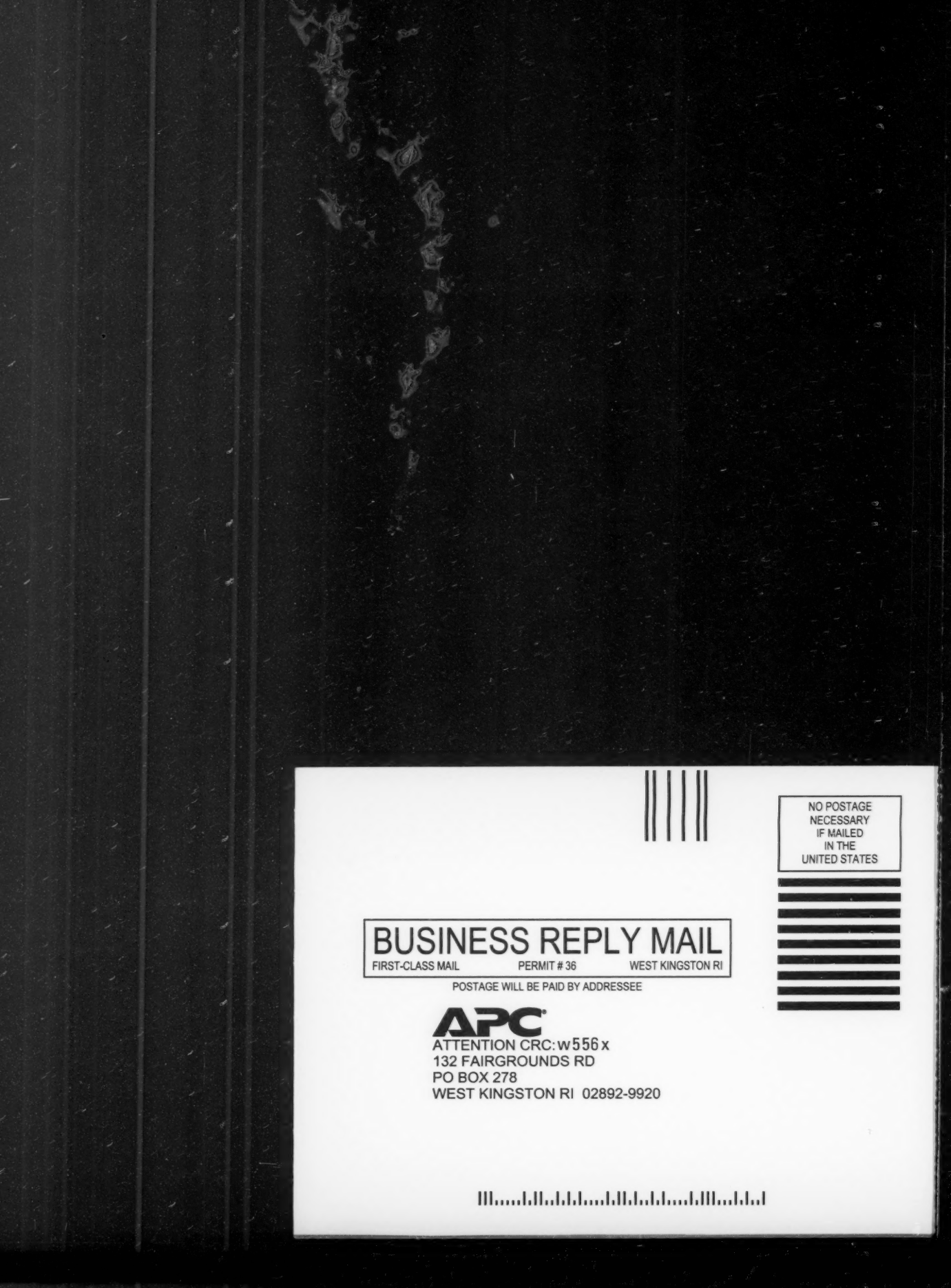

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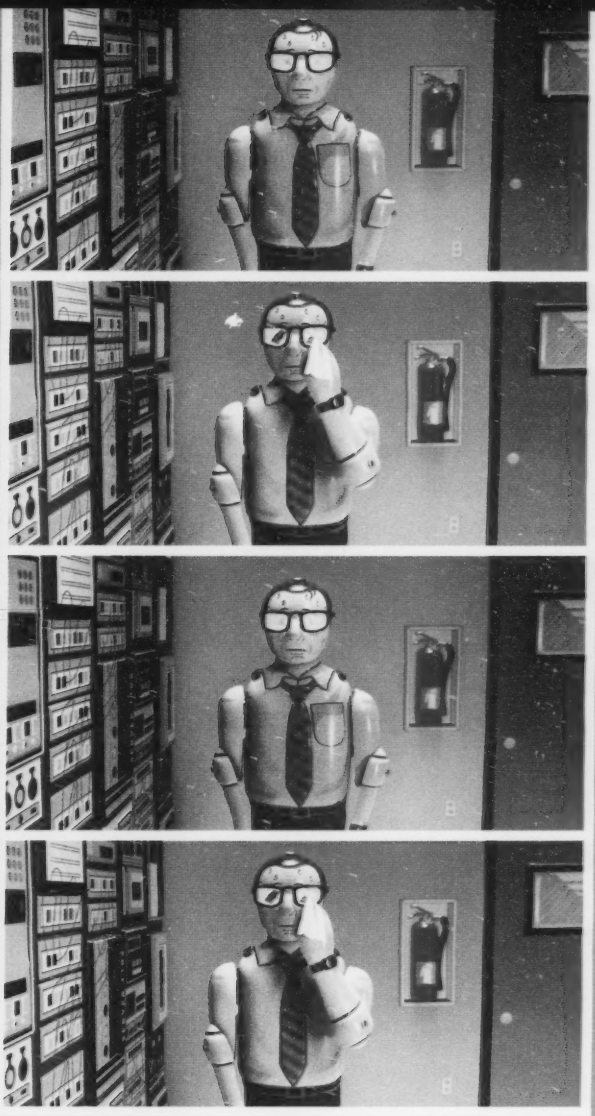

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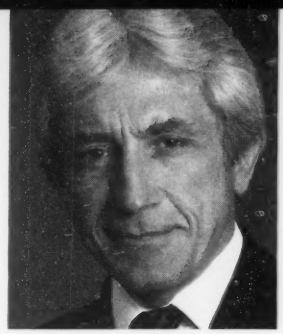
■ EDITOR'S NOTE

Don Tennant

Timeout



A FEW WEEKS AGO, when I interviewed Hewlett-Packard Executive Vice President Ann Livermore, I asked her several of those personal dossier questions that we include as a sidebar in the special Q&A feature we call "The Grill." (I had to ask in case the interview made the cut for The Grill. It didn't.) When I asked her the standard "Last book you read?" question, she seemed uncertain. She eventually threw me a bone and divulged that she reads every Danielle Steel novel she can get her hands on.

The exchange reminded me of a column I wrote 10 years ago when I was working for *Computerworld Hong Kong* and of the fact that over the years, I've received a number of requests that I reprint it. I think the number is two, but I lost count. Here, then, by popular demand (a phone call from a person who kept calling me "Clarice," and a fax from someone who said he was writing with a crayon because he's not allowed to have sharp objects), is a lightly edited version of that 1997 column:

Hey, what's this that was just dropped on my desk? Why, it's the latest edition of "IDG World Update," the International Data Group corporate newsletter! I love this thing. My favorite part is the back page, which is normally a profile of an IDG employee somewhere in the world who is celebrating his 10th anniversary with the company. It's done in kind of a Dewar's Profile format, where you're supposed to get a sense of who the person is from these little snippets.

Of course, I always wonder if I'm really getting an accurate picture of the profilee this way. I mean, if somebody asks you to name the last book you read, and you know your answer is going to be published, are you going to tell the truth and say it was *Uncovering Victoria's Secret*, or lie and say it was *Lev Nikolayevich Tolstoy: The Man and the Myth* (or whatever happens to be the most intelligent-sounding book you've ever heard of)? Please.

■ It's a trick question. Even I know that inviting dead people to a dinner party is in terribly poor taste, but I'll play along.

Let's see . . . how would I respond if it were my 10th anniversary?

Why did you join IDG? They're the only ones who believed me when I said I couldn't divulge my work experience because it was classified.

Five people – living or dead – you'd invite to a dinner party: (It's a trick question. Even I know that inviting dead people to a dinner party is in terribly poor taste, but I'll play along.) Mark Twain, Socrates, Mahatma Gandhi, Mother Teresa and Albert Einstein.

Who am I kidding? OK, to be honest, it would probably be Shania Twain, Mel B "Scary" Spice, Michelle Yeoh, the captain of the Malibu Beach Girls' Volleyball Team and Albert Einstein.

(I've thought this through – I'd have Einstein there to sit next to me because compared to him, I'm a real hunk.)

The last book you read: *The Giant Jam Sandwich*, by John Vernon Lord (for the 1,247th time – I have a 6-year-old).

Interests outside of the office: Avoiding eye contact; asking questions when I already know the answer; trying to read to myself without moving my lips; making deer and giraffe sounds; saying "What?" to a person over and over again to see how many times he will repeat himself before walking away in disgust (the record so far is six – can you imagine?).

Words to live by: "Keep everyone's expectations of you very low. That way, if you ever accomplish anything even marginally above average, they'll be really impressed."

OK, timeout's over. Incidentally, that 6-year-old, Shelly, turned 16 today, and she's getting her driver's license. You enjoy this week's issue. I'll go panic. ■

Don Tennant *is editor in chief of* Computerworld. *Contact him at don_tennant@computerworld.com.*

The Mac's Real Cost Advantage: Durability

As a recent convert to the Mac, Online Editorial Director Scot Finnie has overlooked a significant factor: durability ["Mac vs. PC Cost Analysis: How Does It All Add Up?" *Computerworld.com*, June 8].

I'm typing this on a Mac G3 purchased in 1997. I'm still using OS 9.2.2. I've had to buy two new monitors, and I upgraded the hard drive. Despite the machine's age and potential compatibility issues, it still does 100% of what I need it to and 95% of what I want it to. The only software I've had to purchase this century was ProTools.

My computer has never crashed or destroyed data. I've never had a virus, despite never using antivirus utilities. I have spent less than two hours in the past 10 years dealing with system problems. No security patches to install. It doesn't know about DRM.

The $400 to $500 I could have saved at purchase for a Windows machine is a small fraction of the thousands I saved by paying a little more for a Mac.

■ **George D. Ziemann,** *Tempe, Ariz., wizard@azoz.com*

Microsoft's Scheme

In the article "Linux Camp Divided on Microsoft Deals" [News, June 25], known Linux detractor Laura DiDio of Yankee Group comments that vendors buying into Microsoft's scheme can provide protection for their enterprise users.

The fact that the more successful vendors, such as Red Hat, have publicly declined to play along would tend to discount her comments. The vendors that have jumped into bed with Microsoft are struggling financially, and the net payments in the licensing deals are in their favor.

The general opinion in the technical community is that they're being paid to provide Microsoft with ammunition for yet another FUD campaign against the perceived threat to its business from Linux.

■ **Robert Halloran,** *Jacksonville, Fla.*

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How to Make Windows XP Last for the Next Seven Years

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New portable storage devices, such as USB flash drives, PDAs and portable music players, can store gigabytes of data. Here's how to protect it.
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Revving a Database Without Spending a Fortune

Database administrators reveal tips and tricks for choosing the best tools; it's not about simply throwing money at the problem.
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Green IT: Marketing Ploy Or New Technology?

Critics of "green IT" say that vendors know they can make money by playing up their products' feel-good appeal to the market. But some users say that if a technology doesn't have an ROI, it isn't really "green."
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The Future of Network Access Control

Our columnist exhorts everyone to jump on the NAC train, or risk being run over.
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How to Back Up Your Cell Phone

Some 8 million cell phones will be lost this year, and most users don't consider the ramifications of losing business data. Here's how not to worry.
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News Digest

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THE WEEK AHEAD

MONDAY: Networkers at Cisco Live, a conference for Cisco users, will begin in Anaheim, Calif., continuing through Thursday.

MONDAY: The O'Reilly Open Source Convention will start in Portland, Ore., with two days of tutorials, followed by a conference program that begins on Wednesday.

TUESDAY: Linda Cureton, CIO at NASA's Goddard Space Flight Center, will speak at a breakfast event being held in McLean, Va., by market research firm Input.

SECURITY

Feds Seek $3.3M in Fines on Lab Breach

THE U.S. DEPARTMENT of Energy has proposed fines totaling $3.3 million against the current and former operators of the Los Alamos National Laboratory, saying they failed to protect classified data that was compromised in a security breach discovered last October.

The DOE notified the University of California on July 13 that it intends to fine the university $3 million, which would be the largest civil penalty ever assessed by the agency. It also is proposing a $300,000 fine against Los Alamos National Security LLC (LANS), a company that is jointly owned by the university, government services provider Bechtel National Inc. and two other firms.

In addition, Secretary of Energy Samuel Bodman ordered LANS to take specific actions to bolster physical and IT security at the Los Alamos lab (pictured above). Not doing so could result in additional civil penalties of up to $100,000 per day for each violation, Bodman said.

The enforcement actions follow months of investigation into the breach, in which a contract worker at Los Alamos illegally downloaded classified nuclear data onto three USB thumb drives that were found in a trailer owned by the worker.

The University of California and LANS have 30 days to submit written responses. The university managed and operated the Los Alamos lab, located in New Mexico, through May of last year. LANS took over management on June 1, 2006.

Chris Harrington, a spokesman for the university, said via e-mail that its response "will be informed by the fact that the incident at issue occurred in October 2006 — after the university's management contract ended."

Harrington said the university will also outline actions it took to strengthen security processes at the lab prior to the management changeover. Among them were the implementation of DOE-approved security training programs and the expansion of the lab's diskless and medialess computing environment.

The lab said that officials there are taking steps to address the problems cited by the DOE. For example, on July 10, Los Alamos certified what it described as a new "super vault-type room" for storing classified data.

— Jaikumar Vijayan

MOBILE & WIRELESS

Dual-Mode BlackBerry Debuts

Research In Motion Ltd. last week announced the first dual-mode BlackBerry device, which can provide voice and data services over both cellular and Wi-Fi networks.

Scheduled to become available in the U.S. through AT&T Inc. this summer, the BlackBerry 8820 includes a full QWERTY keyboard, a 320-by-240-pixel display, a trackball navigation system and built-in GPS support. Pricing wasn't announced.

THE 8820, the thinnest BlackBerry yet, includes a removable battery.

The new device switches "seamlessly" between cellular networks and Wi-Fi networks based on the 802.11a/b/g standards, RIM said.

Gartner Inc. analyst Ken Dulaney said that "when RIM does something, it usually works well." But, he added, it's unclear how many BlackBerry users will start using Wi-Fi networks for voice calls to bypass their cellular carriers.

– MATT HAMBLEN

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SECURITY

Some Companies Delay Issuing Breach Notices

AP PHOTO/MARK LENNIHAN

A LETTER from an attorney for Pfizer Inc. to Connecticut Attorney General Richard Blumenthal says the drug maker first learned of a data breach involving about 17,000 of its employees on April 18 — six weeks before it started notifying the workers of the incident.

The July 11 letter, signed by attorney Bernard Nash of Washington-based Dickstein Shapiro LLP, was a response to a missive that Blumenthal sent to Pfizer on June 6. Blumenthal was seeking a full explanation of the circumstances surrounding the breach, in which personal data was exposed after an unauthorized file-sharing program was installed on a Pfizer employee's laptop.

Nash wrote that Pfizer learned of the breach when a computer consultant informed the New York-based company that he had found some of its data on a peer-to-peer network.

Ray Kerins, Pfizer's senior director of worldwide public affairs and policy, said the company needed time to fully understand the incident and its impact before notifying the affected workers. "There was a lot of due diligence that was done," Kerins said.

In a similar case, computer memory vendor Kingston Technology Co. this month began sending letters to about 27,000 online customers whose personal data may have been compromised in a September 2005 breach that wasn't detected until "recently."

According to a spokesman, IT workers at Kingston spotted "irregularities" and began investigating them with help from a computer forensics team. It wasn't until a final report was released internally on May 22 that the Fountain Valley, Calif.-based company could confirm the scope of the breach, he said.

Even then, he added, Kingston "had to gather the appropriate contact information and arrange for consumer protection services and materials" before notifying customers.

— *Jaikumar Vijayan*

Short Takes

India-based Wipro Ltd. said it expects to open a software development center in Atlanta within the next three months. The facility is the first of four development centers that the IT services firm plans to locate in the U.S.

Oracle Corp. said it has agreed to buy Bharosa Inc., a Santa Clara, Calif.-based vendor of software for detecting online identity theft and fraud. The purchase price wasn't disclosed.

EMC Corp. announced the Symmetrix DMX-4, a high-end disk array with end-to-end data throughput of 4Gbit/sec.

Corrections

In the July 9 issue's "40 Under 40" section, the ages of two of the profiled IT leaders were listed incorrectly. Ben Chelf, chief technology officer at Coverity Inc., is 28. And Jason Lish, senior manager of application and SAP security at Honeywell Aerospace, is 29.

MANAGEMENT

Claims of Flawed Voting At ITIL Group Still Murky

THE QUESTION of whether someone compromised an online election held last fall by the IT Service Management Forum's U.S. chapter remains an unsolved mystery. Even the source of the complaints that the voting was rigged can't be positively identified.

But the plot continues to thicken. Last week, *Computerworld* received an e-mail containing a spreadsheet purportedly showing detailed data on the October election, which filled five seats on the ITSMF USA's board of directors.

Only a handful of people are supposed to have access to that information, and the fact that it has leaked out explains in part why the Pasadena, Calif.-based IT standards group has hired risk consulting firm Kroll Inc. to investigate the matter.

"Their directive was to find the truth," said Sallie Kennedy, who heads the ITSMF USA board's governance committee. "It's really starting to feel weird, to be quite frank."

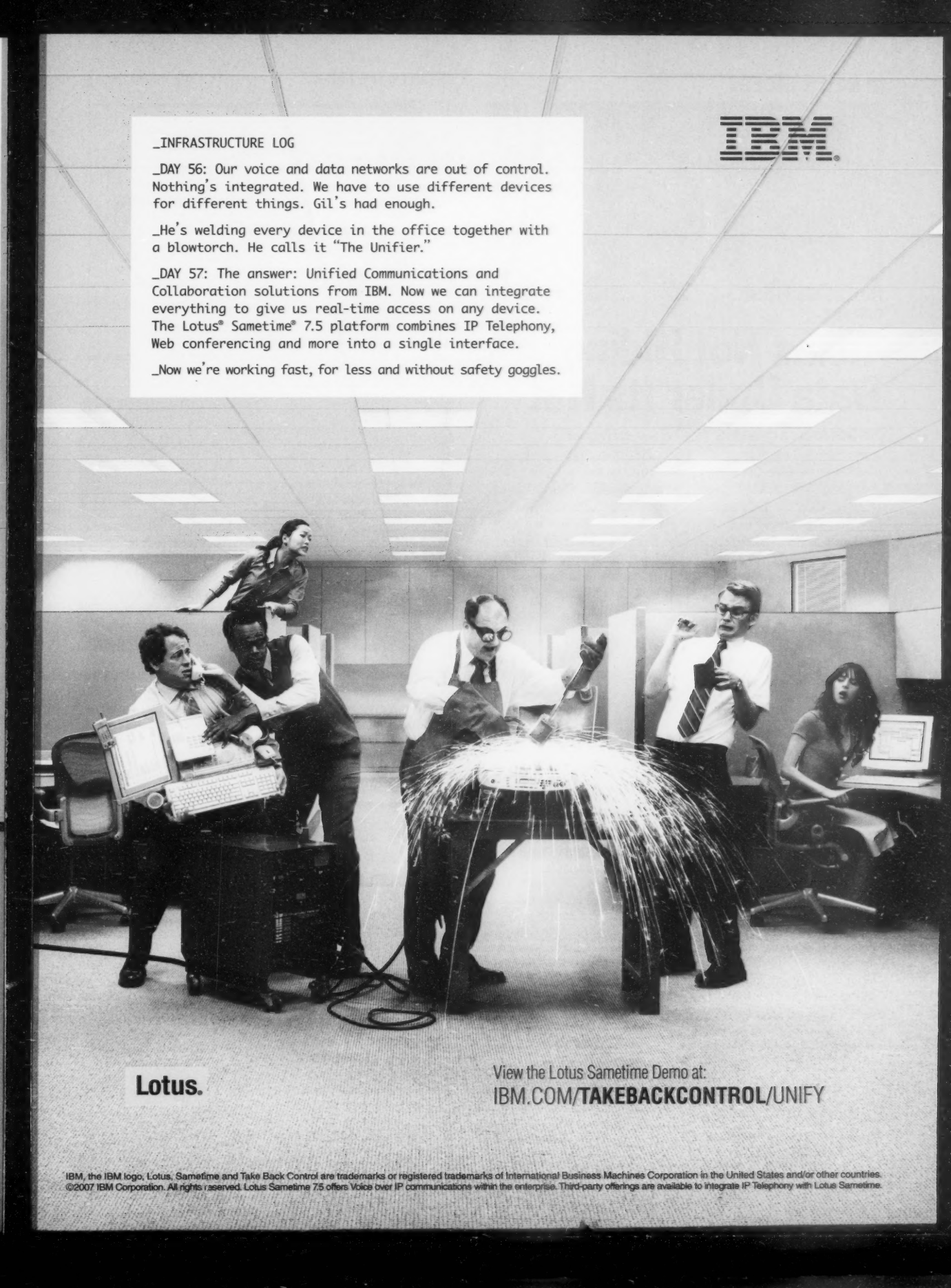
It's really starting to feel weird, to be quite frank.

ITSMF USA BOARD MEMBER

The ITSMF USA is part of an international organization that promotes the adoption of service management standards, such as the IT Infrastructure Library, or ITIL. Leah Palmer, the U.S. chapter's president, sent an e-mail to members in late May to alert them about the voting claims.

Kennedy said the group has yet to find any significant compromise of the voting, although it has identified a couple of people listed as voters who said that they didn't actually vote in the board election.

– PATRICK THIBODEAU


_INFRASTRUCTURE LOG
_DAY 56: Our voice and data networks are out of control. Nothing's integrated. We have to use different devices for different things. Gil's had enough.
_He's welding every device in the office together with a blowtorch. He calls it "The Unifier."
_DAY 57: The answer: Unified Communications and Collaboration solutions from IBM. Now we can integrate everything to give us real-time access on any device. The Lotus® Sametime® 7.5 platform combines IP Telephony, Web conferencing and more into a single interface.
_Now we're working fast, for less and without safety goggles.
IBM.
Lotus.
View the Lotus Sametime Demo at:
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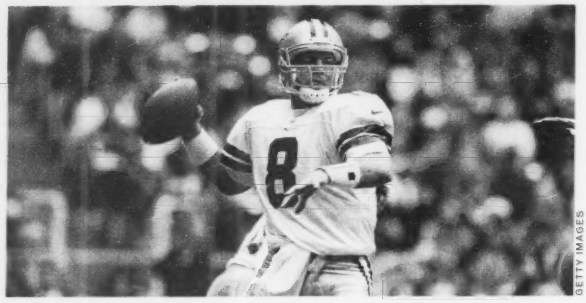
IBM, the IBM logo, Lotus, Sametime and Take Back Control are trademarks or registered trademarks of International Business Machines Corporation in the United States and/or other countries. ©2007 IBM Corporation. All rights reserved. Lotus Sametime 7.5 offers Voice over IP communications within the enterprise. Third-party offerings are available to integrate IP Telephony with Lotus Sametime.



GETTY IMAGES

PRIVACY

Texas Not Hiding Data Under Its Hat

FORMER DALLAS COWBOYS quarterback Troy Aikman may be an icon in Texas, but that hasn't stopped the state from making his address and Social Security number available on the Internet.

Sensitive personal data about Aikman (pictured above) and thousands of other Texans is available on the Texas secretary of state's SOSDirect Web site. For example, Steven Peisner, president of fraud prevention vendor Sell It Safe Inc. in Calabasas, Calif., has provided the IDG News Service with a half-dozen Social Security numbers that he said he obtained from the SOSDirect site.

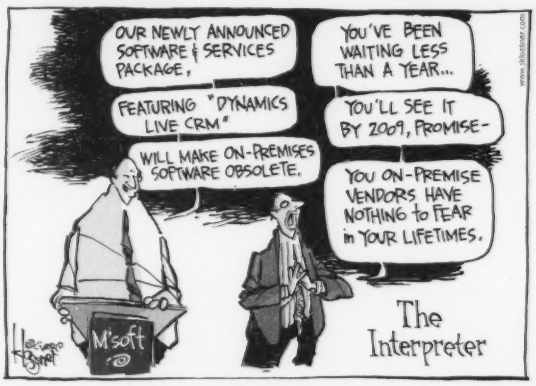
Like many other state and local governments, Texas is working to remove sensitive information from the Web so the data can't be misused by criminals. The state has been automatically removing personal data from all documents filed since June 2005. It is now redacting such information from earlier filings, said Scott Haywood, a spokesman for the secretary of state's office.

But, he added, residents whose Social Security numbers are posted in documents on SOSDirect need to contact the secretary of state in order to have them removed right away.

"Obviously, our office is committed to trying to protect personal information in accordance with the law," Haywood said. "But we also have a responsibility to post public information that has been submitted to our office. So we're balancing those responsibilities."

— Robert McMillan, IDG News Service

BETWEEN THE LINES *By John Klossner*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YOU'LL SEE IT BY 2009, PROMISE-
YOU ON-PREMISE VENDORS HAVE NOTHING to FEAR in YOUR LIFETIMES.
M'soft
The Interpreter

BENCHMARKS LAST WEEK

Electronic Data Systems Corp. said Ronald Rittenmeyer, 60, its president and chief operating officer, will become CEO Sept. 1. Current CEO Michael Jordan will continue as chairman.

Market research firm IDC said worldwide PC shipments grew 12.5% year to year in the second quarter, with every major vendor except Dell Inc. reporting double-digit increases.

TWO YEARS AGO: Interex, a user group for Hewlett-Packard Co. customers, canceled its annual HP World conference and shut down for financial reasons.

Global Dispatches

EU Sets Date for Antitrust Ruling

LUXEMBOURG – The European Court of First Instance will announce its long-awaited verdict on Microsoft Corp.'s antitrust appeal on Sept. 17, sources said last week.

The European Commission ruled in 2004 that Microsoft had abused the dominant position of its Windows software to unfairly muscle in on other software sectors.

Microsoft appealed that ruling, and the court held a three-day hearing in April.

Observers expect a mixed verdict. The court likely will side with the EC's demand that Microsoft release Windows interoperability information to rivals. But it may uphold Microsoft's appeal of a ruling that bundling Media Player into Windows gave the company an unfair advantage against vendors such as RealNetworks Inc. and Apple Inc.

Paul Meller,
IDG News Service

Offshore IT Firms Report Growth

MUMBAI, INDIA – Tata Consultancy Services Ltd. last week reported strong revenue and profit growth despite the appreciation of the Indian rupee against the U.S. dollar and rising salaries in India.

TCS, India's largest outsourcing vendor, reported revenue of 52 billion rupees ($1.29 billion U.S.) in the quarter that ended June 30, up 25.6% year over year. Its profit was 11.8 billion rupees ($292 million), up 37.4%.

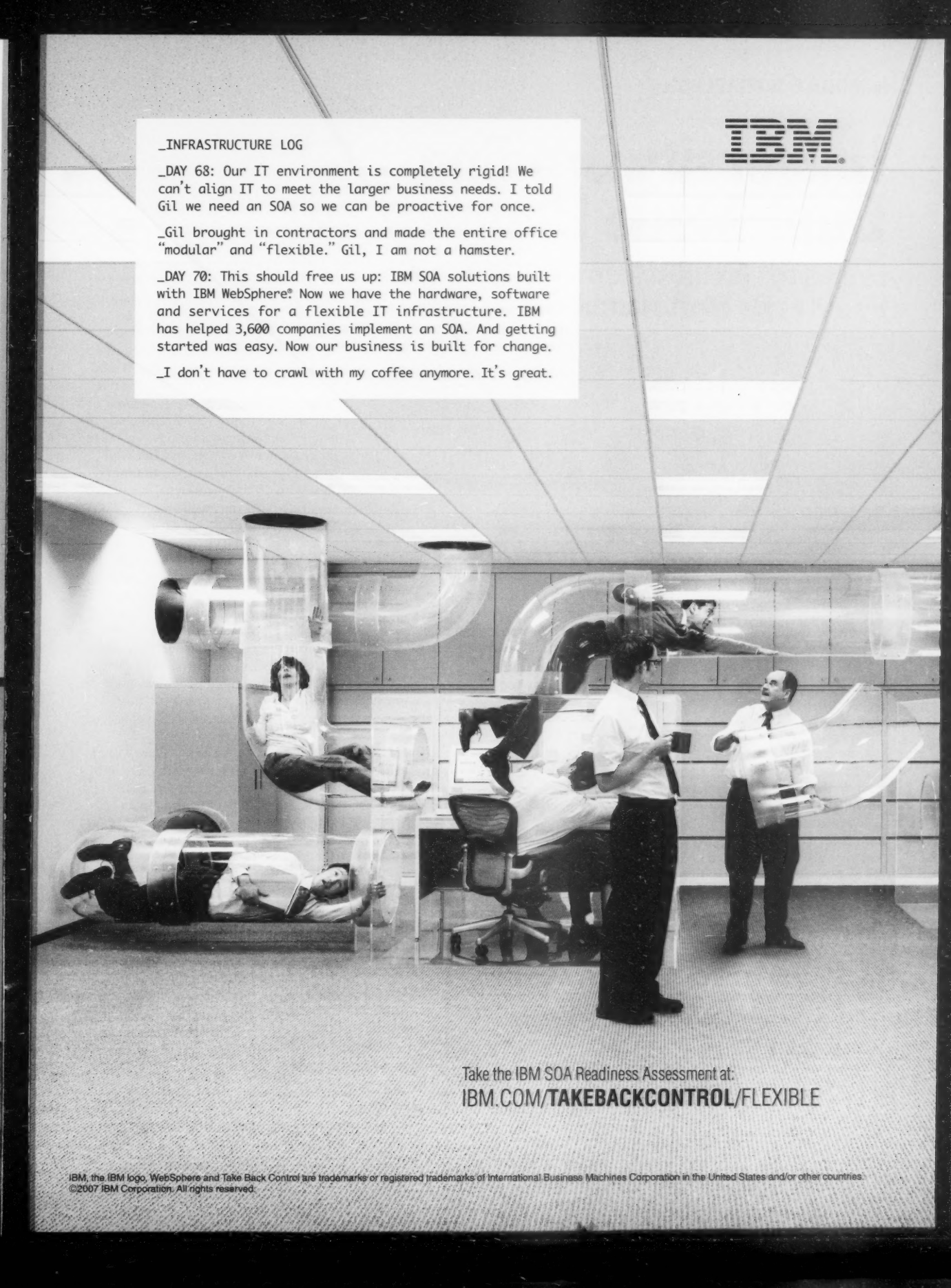
Wipro Ltd., the third-largest IT services firm in India, said its revenue and profit grew 34% and 16%, respectively, in the latest quarter.

John Ribeiro,
IDG News Service

BRIEFLY NOTED

Italian police arrested 26 people in connection with an alleged phishing scam that was designed to swindle bank customers. One of those arrested said the scammers sent fraudulent e-mails that appeared to come from Poste Italiane SpA, the country's postal operator. The e-mails sought to obtain sensitive personal information.

Jeremy Kirk,
IDG News Service


_INFRASTRUCTURE LOG
_DAY 68: Our IT environment is completely rigid! We can't align IT to meet the larger business needs. I told Gil we need an SOA so we can be proactive for once.
_Gil brought in contractors and made the entire office "modular" and "flexible." Gil, I am not a hamster.
_DAY 70: This should free us up: IBM SOA solutions built with IBM WebSphere® Now we have the hardware, software and services for a flexible IT infrastructure. IBM has helped 3,600 companies implement an SOA. And getting started was easy. Now our business is built for change.
_I don't have to crawl with my coffee anymore. It's great.
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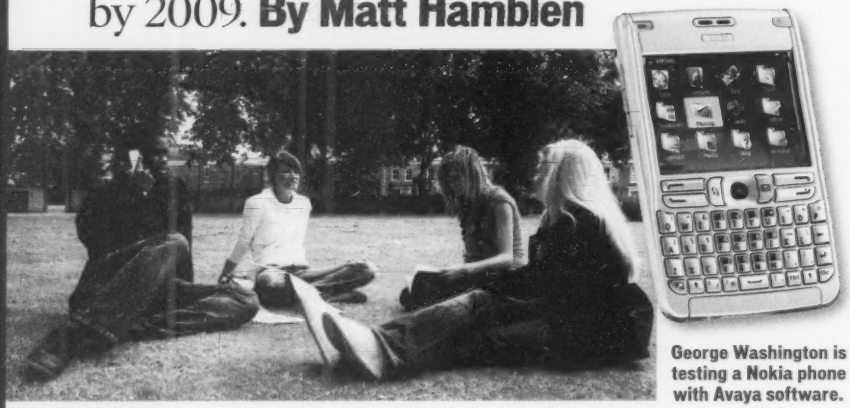
University Grading Dual-Mode Phones

Hopes to spread system to 30,000 users by 2009. By Matt Hamblen



George Washington is testing a Nokia phone with Avaya software.

GEORGE Washington University is testing 25 dual-mode wireless phones that allow users to move between indoor Wi-Fi networks and outdoor cellular networks.

If the technology proves reliable and its promise to cut costs bears out, the university could support up to 30,000 dual-mode phones for students and staffers on its three campuses by 2009, said Bret Jones, director of technology and engineering at the school.

Jones said the Washington-based university hopes that a dual-mode system will cut cell phone expenses by making extensive use of university-controlled Wi-Fi networks.

The test began two weeks ago and is expected to be lengthy. It uses $400 E61 phones from Nokia Corp. that are equipped with Avaya Inc.'s One-X Mobile Dual-Mode client software, which was introduced last week.

Jones said he hopes that the testing will be completed by the fall of 2008 and that implementation will begin a year later.

The Avaya client software, which costs $160 per user, provides access to IP-based applications on servers running Avaya's Communication Manager call processing software, allowing one office number to handle conference calls, speed dialing and speech activation of applications, Jones said.

The primary advantage of having a single phone number for both types of networks is that it "increases mobility and makes the cell phone an extension of the office phone, with all the function of the office phone," he added.

The university evaluated several alternative dual-mode systems but picked Avaya's offering because the Basking Ridge, N.J.-based company "is very strong, and I've been real happy with their products," Jones said.

But he noted that testers have already experienced some difficulties in switching between cellular and Wi-Fi networks "without losing the call."

"As you move across a boundary, the call doesn't disconnect, but it does delay," Jones said. "That's one of the challenges."

Another hurdle for the university is getting help from cellular network operators as it tries to address the problem, Jones said.

"They are not really supportive of this technology, for obvious revenue reasons," he said. "Anytime a cell phone is on Wi-Fi, they are not collecting cell minutes. That is one of the biggest challenges with this technology."

Cellular network operators are testing and developing their own dual-mode systems, in which they provide software to smoothly link a phone call from Wi-Fi to a cellular network, several analysts said. They noted that the providers may eventually sell dual-mode phones for their own networks under multiyear subscription plans.

Jones said there are "several challenges" in getting dual-mode phones to make a smooth transition from Wi-Fi to cellular, and there are "different issues with different carriers" because they have varying levels of service on their networks.

In addition, the current price tag for the phone from Espoo, Finland-based Nokia and Avaya's software would likely prevent students from embracing the plan, Jones said. He hopes that by the time of implementation, cellular companies will be offering hardware deals for users of their networks.

"Until the cellular providers support this technology, we won't see subsidized phones, and that's a big concern," Jones said.

"Clearly, dual-mode systems would save money for an enterprise or campus when it comes to mobile users spending considerable time in an office or on the road," said Brian Riggs, an analyst at Current Analysis Inc. in Sterling, Va.

> **"Anytime a cell phone is on Wi-Fi, [network operators] are not collecting cell minutes. That is one of the biggest challenges with this technology.**
>
> **BRET JONES,** DIRECTOR OF TECHNOLOGY AND ENGINEERING, GEORGE WASHINGTON UNIVERSITY

The key value of a dual-mode system, said Riggs, "would be to prevent John from calling Frank on the third floor from the second floor while using the cell phone minutes plan."

Jones agreed with Riggs' assessment that the university will likely have to upgrade its Wi-Fi network and add new software that prioritizes voice traffic over data traffic to fully implement a dual-mode system. ■

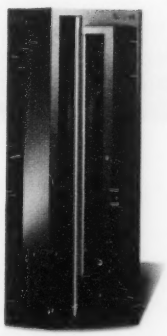
_INFRASTRUCTURE LOG

_DAY 78: Our energy costs are staggering! We're spending more to power and cool the hardware than we did to buy it in the first place.

_It's too darn hot. Gil moved the entire data center to the Arctic Circle. Gil, this commute is ridiculous.

_DAY 81: Here's something better: IBM energy management solutions. IBM services helped us identify and tackle our power and cooling inefficiencies. The IBM System z™ server's high utilization and unique design mean we're not feeding our old, power-hungry environment.

_Gil doesn't want to hear it. He says he's snow deaf.



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Companies Scramble To Archive E-mail

Legal and regulatory requirements force costly projects. By Brian Fonseca

REGULATORY and legal issues are forcing IT managers to create costly e-mail storage and archival systems as electronic documents replace paper as official business records.

Users and analysts note that courts and regulators are increasingly pushing companies to produce stored e-mail documents on demand or face penalties.

For example, allegations that Intel Corp. failed to properly archive potentially critical e-mail messages — some written by its top executives — could prove crucial in an antitrust lawsuit filed against it by rival Advanced Micro Devices Inc. in 2005.

The company failed to produce e-mails for the court by March 2007, prompting Sunnyvale, Calif.-based AMD to charge that the chip maker was negligent in not saving or archiving the disputed documents.

The Delaware federal court extended Intel's deadline until August, noted a company spokesman.

"We're in the process of going through literally millions and millions of e-mails," he said. The spokesman declined to reveal exactly what Intel is doing to retrieve the documents, or what may happen if they aren't retrieved in full.

Archived e-mail has also become a critical part of a class-action lawsuit that charges Best Buy Co. and Microsoft Corp. with signing up thousands of customers to Microsoft's MSN online service — and eventually charging their credit cards — without permission.

One lawyer representing Best Buy last month admitted to falsifying at least two e-mails that were handed over to the plaintiffs. The lawyer's firm, Robins, Kaplan, Miller & Ciresi LLP in Minneapolis, has since voluntarily withdrawn from the case.

"I do think [e-mail archiving] is a critical issue, in terms of being able to guarantee that an e-mail is valid and that it exists in its original form.

JASON KING, WINDOWS GROUP SUPERVISOR, FOXWORTH-GALBRAITH LUMBER CO.

Beth Terrell, a partner at Seattle-based Tousley Brain Stephens PLLC, which is co-counsel for the plaintiffs, said that Best Buy's initial delay in delivering pertinent archived e-mails raised suspicion.

"We had all this e-mail coming from Microsoft discussing basically the issues that are key to our case, and some of them were discussions with Best Buy," she said. "We were getting virtually no electronic documents or e-mail from Best Buy. It seemed very suspicious to us."

Best Buy did not respond to a request for comment on the four-year-old case.

Terrell said she is astonished that executives continue to use e-mail — which she called "a powerful [legal] tool" — as an unofficial means of communication.

"You find corporate officials making admissions in e-mail that you would not find anywhere else, and a lot of the time, they forget they made those admissions," remarked Terrell.

Brian Babineau, an analyst at Milford, Mass.-based Enterprise Strategy Group, said that his firm's research has found that three out of four organizations that go through court-ordered electronic discoveries must produce e-mails related to the queries.

Those steps usually involve identifying e-mail, preserving it and producing e-mail documents for a court, he said.

Babineau noted that the full implications and weight of e-mails as viable legal documents will likely be determined through court decisions.

Larry Kimmel, director of compliance at First Albany Capital Inc., a New York-based brokerage firm, noted that despite declining costs for basic e-mail storage systems, archiving can still be as costly as it is critical.

Keeping up with evolving data retention and regulatory compliance requirements compels First Albany to continually evaluate and buy new technologies, Kimmel said.

"It's becoming very expensive," he said. "It's becoming a very costly proposition to abide by all the [government] rules coming out."

Kimmel said that First Albany uses Iron Mountain Inc.'s Email Archiving and Supervision hosted services to monitor every electronic message

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passing through its servers, enabling managers to comply with state and federal regulations.

He noted that First Albany also uses Boston-based Iron Mountain's services to store and archive electronic data — including 4.6 million e-mails as of May 2007. "E-mail has proliferated beyond everyone's original vision," Kimmel said. "Virtually no one sends paper any longer."

In addition, he said, the financial services firm must store all incoming and outgoing correspondence, including e-mail and instant messages, for at least three years to comply with U.S. Securities and Exchange Commission regulations.

According to a study released last month by market research firm IDC, in 2011 companies will spend $2.18 billion for legal discovery and litigation-support infrastructure products, physical records and storage management services. That total represents annual growth rates averaging 17.6% beginning this year.

As Jason King discovered, corporate executives are increasingly turning to IT administrators to find archived electronic communications that can settle sensitive disputes between companies and customers, or employees and managers.

King, a Windows group supervisor at Foxworth-Galbraith Lumber Co., said archived e-mail was used to settle a conflict between a member of the Dallas-based company's sales staff and a customer over the contents of a specific message.

The archived copy of the disputed e-mail showed that the salesperson's description of the contents was correct, he said. "It definitely made a big difference," King said.

> **"It's becoming a very costly proposition to abide by all the [government] rules coming out.**
>
> **LARRY KIMMELL,** DIRECTOR OF COMPLIANCE, FIRST ALBANY CAPITAL INC.

"I do think [e-mail archiving] is a critical issue, in terms of being able to guarantee that an e-mail is valid and that it exists in its original form," he added.

Foxworth-Galbraith Lumber has used Archive One software from Reading, England-based C2C Systems Ltd. to archive e-mail messages for more than two years, King said. The product saves nondeleted e-mail after a specified number of days; it's backed up by IBM Tivoli Storage Manager for long-term off-site storage.

King said his company selected the C2C offering over EMC Corp.'s EmailXtender and Symantec Corp.'s Enterprise Vault. Archive One was priced lower than the other products and offered simpler management capabilities, he said.

Virtua Health in Marlton, N.J., installed archiving technology last year to ensure compliance with the Health Insurance Portability and Accountability Act and other regulations.

Andrew Gham, network architect at Virtua Health, said the hospital network chose Mimosa Systems Inc.'s NearPoint e-mail archiving system because of its "log shipping" capability, which keeps a clear trail of e-mail and archives every message delivered.

Virtua Health, which runs a single IT system to provide services to four interconnected hospitals in New Jersey, can now produce archived e-mails on demand, Gham said.

He noted that since the new technology was installed, no important requests for archived data have been refused.

"There's been several times in the past where legal or human resources have asked for information about e-mail usage from our users that I haven't been able to retrieve," said Gham. "Over the last year, I've been able to get that data for them, so that's been a big plus." ■

Firms Turning to Registered E-mail for Protection

A new authentication technology is emerging as a potential aid in corporate efforts to establish e-mail verification processes.

Similar to its paper-based counterpart, registered e-mail provides certification that a message was sent and received. It also certifies who sent the message and when.

When the option is activated, a self-contained receipt is electronically delivered to the sender, said Zafar Khan, CEO of Los Angeles-based RPost Inc., a maker of the technology.

FLORES: Authentication helps ensure compliance.

San Diego-based Quality Assurance International Inc. has used the RPost software for more than two years to ensure compliance with U.S. Department of Agriculture standards, said Hector Flores, an IT administrator at the company.

Quality Assurance, whose clients include restaurants, food producers and retailers, certifies that organic food meets federal standards.

"It minimizes our need to resort to legal counsel," said Flores. "In a few cases, we've had clients question us about receiving communications. When we ask them if they want to see a record, they get back to us shortly and say they found the e-mail."

Flores said that 90% of Quality Assurance's e-mail documents travel through the RPost system. Next month, RPost will unveil a new managed service called Transactional Email Archival.

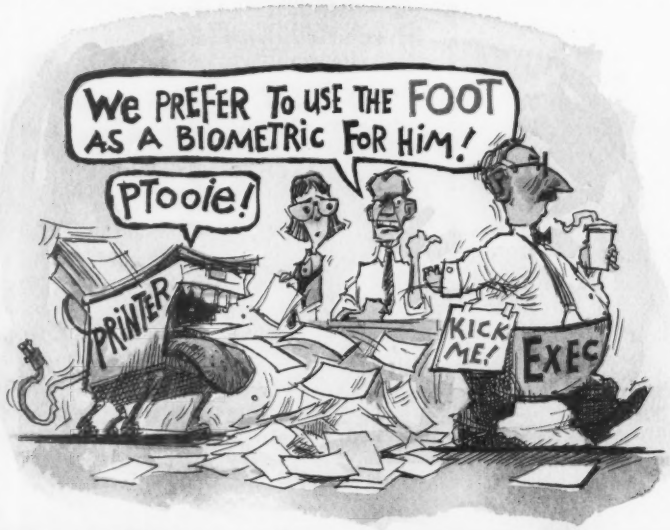
Brian Babineau, an analyst at Enterprise Strategy Group, said the software's upside may be limited because the sender still ultimately decides whether to activate the registered format.

"I may be in a questionable conversation, so there's an unlikely chance I'll use that in registered verification," said Babineau. "If people wanted do mess around and do bad things, technology may not stop them."

– BRIAN FONSECA

On the Mark

HOT TRENDS ■ NEW PRODUCT NEWS ■ INDUSTRY BUZZ BY MARK HALL



MATTHEW FAULKNER

Print Chips Just Like Memos

KLAUS SCHROETER envisions a popular, low-cost, foolproof, biometrically protected future for all IT systems. It's easy, he says, once you start producing application-specific "organic semiconductors" on ink-jet printers, which is, of course, his plan. The CEO of NanoIdent Technologies AG in Linz, Austria, describes a world where biometric processors made with highly conductive conjugated polymers are mixed with nanoparticles and then cranked out on ink-jet printers like memos from the boss. With such a simple production process, it will be cheap to slap a biometric sensor on everything IT, he contends, from routers and servers to a cell phone's plastic case, or even transparently on a device's display. According to Schroeter, NanoIdent's processors, which range in size from a few centimeters square up to 50 by 50 cm, can detect multiple biological traits — not just fingerprints, but things like vein patterns and tissue structure. He derides fingerprint-only readers as easily duped and "weaker than a password-protected system." Watch your nearby printer for organic semiconductors lying around the paper tray by early 2009, predicts Schroeter.

Produce biometric sensors on ink-jet printers, says Schroeter.

Upgrade Is No Game

Migrating a supercomputer system to new high-performance computing (HPC) management software isn't an easy process. It's harder still when your plan is to make the change without disrupting your 200,000 users, who will continue to bang away at your application, demanding 400,000 I/O operations per second while generating more than 150 million database transactions per day. Oh, and it's not your typical HPC environment. It's Windows. But that's Halldor Fannar's plan for early next year. As chief technology officer at CCP HF in Reykjavik, Iceland, he's responsible for the overall architecture and performance of EVE, a multiuser, interactive online game that takes place in a virtual universe with 5,000 active solar systems. In the real universe, the Python code primarily used to develop EVE runs on hundreds of IBM LS20 blade servers using Windows Server 2003. For years, Fannar has depended on homegrown HPC management software. But, he says, it's getting to be too difficult to maintain the tools, and Microsoft Corp.'s HPC features, such as cluster management at start-up, impress him. Once the upgrade is complete, he believes his cluster will return to the famous annual Top500 list of supercomputers, where he hopes it will remain "for a long time."

2.5
Weight in tons of the EVE supercomputing cluster.

Online Storage Forever – Even for iPhones

Speaking of a long time, it's hard to beat eternity. That's how long Foreversafe SAS in Troyes, France, says it will store unlimited files and data of any type, even if you drop the $59-per-year service. The company, which launched its Unlimited Safe online storage service in the U.S. this month, already has 55,000 users in Europe storing 500TB online, says CEO Emmanuel Chriqui. He thinks iPhone users will flock to it — once the service is ready for them later this year. Although the service works fine with Macs and the Safari browser now, Foreversafe still has to tweak it to handle Safari on iPhones.

Chriqui: Get unlimited online storage that lasts forever.

Correction

Last week in this column, it was reported that San Jose-based Quantum Corp.'s DXi 7500 backup system used tapes. Way wrong. The DXi 7500 is a disc backup system. Even a journalist should be able to know the difference. Apologies to all for being sloppy. ■

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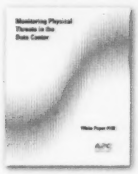

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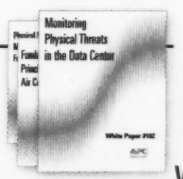

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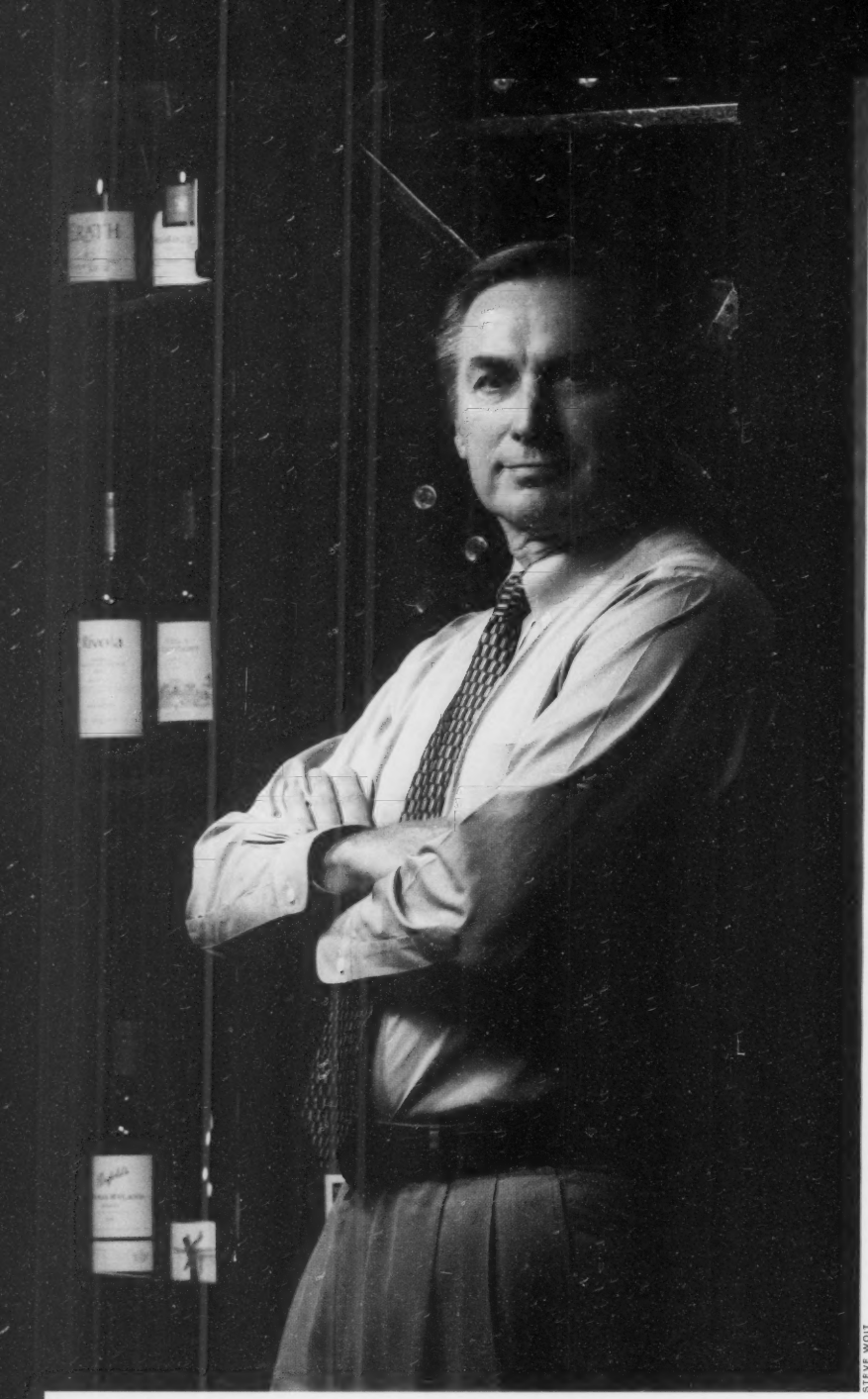


STEVE WOIT

Dossier

Name: Harry Debes

Title: CEO

Organization: Lawson Software Inc.

Favorite vices: An occasional Grey Goose martini and watching the NFL.

Most interesting thing most people don't know about him: "In the 1990s, I owned a minor league baseball team called the Sydney Storm, an affiliate of the Toronto Blue Jays. People who think I'm all work and no play are completely wrong."

Favorite recent movies: *The Departed* and *Casino Royale*

Favorite personal technologies: The iPod and TiVo

■ **THE GRILL**

Harry Debes

The **CEO** of **Lawson** talks about **ERP on demand**, **market consolidation** and **playing the role** of the anti-SAP.

Harry Debes *took over as CEO of Lawson Software Inc. in June 2005, just as the company was acquiring Sweden-based Intentia International AB, a deal that would make Lawson one of the top ERP vendors in size behind SAP AG, Oracle Corp. and Microsoft Corp. Lawson now faces a market dominated on the one hand by much larger players and, on the other, by smaller agile companies, such as Salesforce.com Inc. and NetSuite Inc., that offer hosted applications.*

We hear a lot about Salesforce.com and its software-as-a-service, on-demand model. Now SAP is getting into this market with its recently announced A1S hosted offering. What's your opinion of this trend? It's an interesting phenomenon. One organization with a flamboyant CEO has seen some success in this market. Salesforce.com [sales force automation] is the simplest type of application. Some applications lend themselves well to that model, but I'm not sure the marketplace wants an SaaS model for all software delivery. We're not getting that feedback from our clients. I'm not aware of classic manufacturers who want that model for financials or other ERP software. If it were so, everyone would have gone there already, because the customer demand would be there.

Continued on page 20

The Highly Reliable Times

VOLUME 1 – ISSUE 4

Windows Server 2003

STATE OF ILLINOIS VOTES FOR WINDOWS SERVER OVER LINUX

Tom Nagy for The Highly Reliable Times

THE STATE OF ILLINOIS covers 56,400 square miles, with a population of about 13 million.

Risk of Linux Too Great–State Government Needed Reliability

By MICHAEL BETTENDORF

SPRINGFIELD, Ill. – As part of a massive effort to modernize and standardize its IT infrastructure, the State of Illinois had narrowed the choice down to either a commercial distribution of Linux or Windows Server® 2003 as the foundation for the new system. The state's IT staff had specific criteria that had to be met, and reliability was at the top of the list. After an evaluation of the two platforms, the state simply found too many questions around Linux.

"We can't take big risks with our technology," said Paul Campbell, former Director of the Illinois Department of Central Management Services. "State government needs trusted, tested technology that's reliable and predictable." By choosing Windows Server 2003, Campbell felt the state was investing in a well-tested, well-integrated technology that would deliver the high system reliability he expected. With Linux, he wasn't so sure: "It would have meant too much pain for us to move to a Linux-based system. In government, IT is all about consistency and reliability. So for us, stacking up mismatched parts doesn't make good business sense." In addition, Campbell had confidence that Windows Server would be a good choice for the future, saying, "Part of the reason we felt we could rely on Windows Server is that there's a great roadmap for the platform. With Linux, there is no roadmap."

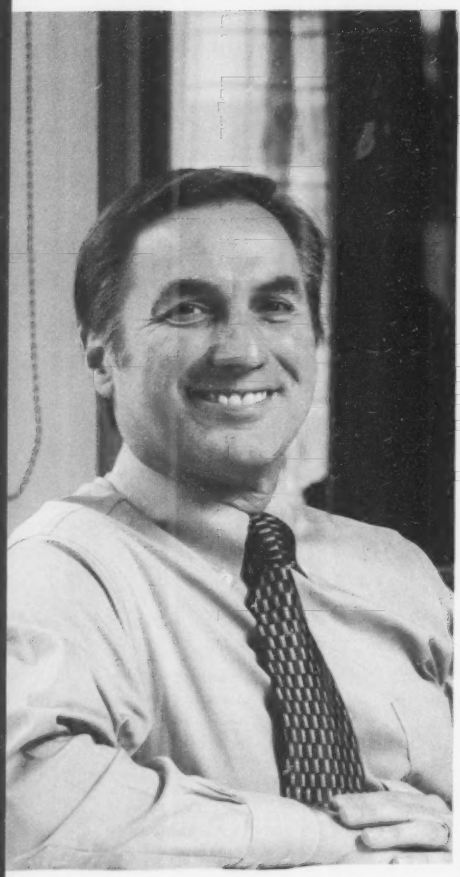
For the full State of Illinois case study, plus other case studies and independent research findings on the reliability of Windows Server versus Linux, visit our Web site at microsoft.com/getthefacts

"It would have meant too much pain for us to move to Linux. For us, stacking up mismatched parts doesn't make good business sense. That's why we went with Windows Server."

– Paul Campbell, former Director, Illinois Department of Centralized Management Services

BREAKING NEWS: Colleagues baffled by IT director's calmness

Since achieving rock-solid reliability from a new Windows Server implementation, Paul Campbell (left) has been calm and "almost Zen-like," according to one associate. *– Continued on Page B3*



"The customer doesn't want just one flavor of red or white – they want the pinot and the zinfandel, too. The customer wants a choice.

Continued from page 18

Lately, Oracle has been buying everything in sight in the enterprise applications marketplace. Does this consolidation hurt you? I applaud Oracle for trying to make its portfolio a one-stop-shop offering wherever possible. That seems to be working for the bottom line but not the top line.

The difficulty of being an acquired customer is that, in the short to medium term, you have one vendor, but you can't immediately get to one integrated solution. You still have a series of disparate products. It's three to six years before you can properly integrate or replace the applications, and that effort for clients is costly and a painful experience. They look at alternatives, and it's not automatic that they'll just migrate to the next version of Oracle.

If the industry continues to consolidate to one major player, which of the top ERP vendors would you prefer – or least prefer – to compete against? It doesn't matter to me if there is only one survivor. We compete against them today, and I'm not afraid of any of them.

I'm not trying to minimize that. They're very large and successful businesses. But the good news is that the customers want choice, not just one flavor.

Right now, there are a lot of media representatives and analysts telling the customer community, "Here's the deal: You can have two wines. One's a California red, and the other's a German white, and that's it. Which do you like?" The customer doesn't want just one flavor of red or white — they want the pinot and the zinfandel, too. The customer wants a choice.

Some SAP and Oracle accounts acquired Lawson for some of their divisions simply because they don't want the incumbent vendor to dictate the future terms of business to them and for them to have all their apples in one basket. They want to keep their primary vendor honest.

When a customer asks the question, "How do you feel competing against larger organizations in my space?" I ask, "Do you have competitors any bigger than you?" How does any hardware or grocery store compete against Wal-Mart? It's not as customer-friendly, and some people refuse to go to Wal-Mart. That's nothing against Wal-Mart. But some people prefer to buy their jeans in a boutique shop or want more of a brand-name item.

A large company, you would say, has all the odds in its favor. But still, my answer is that there is room for a nimble, focused competitor that gives the customer service. We are the anti-SAP and the anti-Oracle.

You're competing against vendors that can sell entire platforms. At what point does having multiple disparate applications become troublesome for customers? As technology advances and we approach a service-oriented architecture, the interface between Lawson and other solutions becomes increasingly easier and less complicated and less of a risk for our clients. We're offering the top-ranked technology playing in the market [IBM WebSphere middleware]. We're not having any pushback from customers. They can pick Siebel for CRM or Salesforce.com and interface to it. It won't be a challenge to do so.

How is the Lawson/Intentia merger going? We've made a lot of good progress with our financial results. Most people forget Intentia was distressed when we bought it. It wasn't a bad fit, but it needed turnaround work.

What non-Lawson technologies interest you? Radio frequency identification. Dogs and cats are being implanted with it. It's been implanted in people's arms and legs. In the next 20 to 30 years, [the implants] will include their ID, credit card and passport information. It has both good and bad potential, but it doesn't matter. It's going to happen.

The software industry historically is known for having CEOs with big egos – such as Larry Ellison. Are those days gone? Larry Ellison is fun to watch and not to take too seriously. It's smart. He does things to get attention and get a reaction from the media, as does Marc Benioff [CEO of Salesforce.com]. I think there will always be room for people that are flamboyant and have something to say. It's not accidental. But it's not a prerequisite. Sam Palmisano at IBM and Mark Hurd at HP and SAP's Henning Kagermann aren't known as having big egos.

And your style? I'm in the middle. I'm not as flamboyant or outspoken — or quite as conservative as the other guys. I think it's my management style to collaborate. I don't ever want it to be all about me.

— *Interview by* **Marc L. Songini**

■ OPINION

Bruce A. Stewart

Essential To-dos

CUTBACKS in IT spending are becoming more common as 2007 moves on. Perhaps you have not yet been affected. But enough of you have been that vendors reporting their quarterly results are guiding expectations downward and showing deteriorating revenues, rising costs and growing inventories. The moment someone asks the deadly question, "What are others spending on IT?" you, too, will probably see retrenchment.

Before that question is asked, you must become tightly focused on the key projects among the many awaiting action into next year. If you want to be able to execute these key to-do items, you need to line up your allies now so that you can protect them through any cuts you may face.

These are the sorts of projects my clients are working on:

■ **Bringing collaboration tools to the workplace.** Companies that can't recruit and retain the millennial, or digital, generation are going to find themselves severely short of talent when the baby boomers start to retire. And because sociologists and leading thinkers on Enterprise 2.0 are in agreement that a workplace without open communication will fail to hold the generation born after 1978, you need to use things like wikis, blogs, instant messaging, an internal profile page system (something like Facebook) and an easy-to-update content manager.

Yes, you need more than these tools, but these are expected by the millennials. Fortunately, benefits will flow quickly once you're over the hurdle of getting these things up and running.

■ **Spending money to remove costs.** We all can find lots of "cleanup" activities with the potential for a good return on investment.

If you don't believe that's true, just spend a few days doing fieldwork in your users' offices. You might find that some of them depend on tools that require an inordinate amount of maintenance and possibly even a regular influx of contractors to keep them going. Or maybe you'll see how unproductive workers are when they have to use spreadsheet bridges or rekey information from one application to another, so you'll decide to build a new component inside your ERP framework to eliminate that sort of grunt work.

■ My clients don't think 'normal' is coming back – and neither should you.

This kind of activity shows that you are serious about intelligently managing your costs and will help you gain support from the finance department.

■ **Putting in key frameworks rather than point solutions.** Every group in your company wants to get something from IT, so they pressure you for point solutions. But proliferating point solutions just add to IT complexity and cost.

When money is tight, you need to consider the big picture and what will position you for a better cost profile in the future. Ask yourself what really needs refurbishing and whether the technology is something the company is going to need for years to come. You may find that with the depreciation curve, the wisest investment could be something like upgrading to a newer version of your ERP suite.

■ **Refreshing infrastructure aggressively.** If you haven't already consolidated and virtualized your server farm, cleaned up your data stores and moved to denser packaging, these are all good activities to champion in a company that's hunkering down. And it will be easier to make your case if you can bundle years of maintenance and licensing into the capital allocation.

Operating budgets are going to feel the real pressure in the next few years, so trading several years of operating costs for capital today is a sound proposal.

It's important to note that my clients don't believe this is a short-term problem. They're paying attention to the falling exchange rate and worrying about the costs of parts and products produced overseas. They don't think "normal" is coming back — and neither should you.

Think like your CFO, and you can thrive, even in a time of cutbacks. ■

Bruce A. Stewart *is CEO of Vancouver, British Columbia-based Accendor Research Inc., an advisory services firm focused on management issues in the technology-enabled enterprise. He can be reached at bruce.stewart@accendor.com.*

The Fixers

These turnaround CIOs get ailing IT departments on track fast and then move on. By David Raths

THE COMPANY has already gone through two CIOs this year, and it's only April 1. During the job interview, the CEO tells you that you have six months to turn IT around, because the company is being positioned for sale. And by the way, feel free to fire all 50 current IT staffers.

Would you take this job? Terry Knecht did.

From 1995 to 1997, Knecht led the IT operations of Los Angeles-based Lexi International. The telemarketing company had made the *Inc.* 500 list twice, yet its IT operations were in disarray. "Most of the people in IT were not IT people but telemarketers who had taken over that function," Knecht recalls.

His first step as CIO was to hire a few lieutenants who had worked with him before. They quickly moved to replace most of the IT staff as they developed new core business applications and began setting up a data warehouse.

"When you are positioning a company like that for sale, the buyer has to see the IT operations moving in the right direction," he says. (Lexi was sold to Thayer Capital Partners in 1997.)

Knecht, who has led IT turnarounds at several companies, is currently CIO of The University of Iowa Foundation. He arrived there in 2004 as a turnaround CIO, but the situation wasn't desperate. He buffed up the IT staff, created an effective infrastructure, built relationships and mapped out a stable IT strategy. Now, he says, things are in good shape.

Knecht is one of a particular breed of CIO who moves from one difficult situation to the next, often jumping from industry to industry, and usually staying in a job only two to three years. Sometimes called paratrooper CIOs or even mercenaries, they thrive on challenges and, like the CEOs who hire them, have limited patience. "You have to establish key pieces of your program before the CEO loses faith or interest," Knecht says. "You have less than a year."

ROGER JONES

Independent IT consultant, 2003 to present

CIO, Fortis Health, Milwaukee, 2001 to 2003

CIO, IBP Inc., Sioux City, Iowa, 1996 to 2001

CIO, Diversity Corp., Detroit, 1995 to 1996

Knecht and two other CIOs with similar backgrounds explain how they approach a turnaround situation.

SEE EYE-TO-EYE WITH THE CEO

UNLIKE MOST NEW CIOs, turnaround specialists don't have the luxury of spending a lot of time studying their options or building relationships before acting.

Before accepting a job, turnaround CIO Roger J. Jones asks questions the CEO is bound to find uncomfortable. "I ask what is it about their behavior that's contributing to the fact that they're going through CIOs," he says.

He looks for red flags. For example, having the CIO report to the chief financial officer may be a big part of the problem. Or it could be that the CEO isn't spending enough time talking with senior business managers about IT projects to understand where the problems lie. Does the CEO know whether IT is resolving business problems in a reasonable time? Or is it possible IT has been made a scapegoat for other underperforming departments?

Jones tries to get the CEO to explain what he means when he says, "Fix IT." What part isn't performing? "I do my own analysis," Jones adds, "and make sure it agrees with their assessment."

He says the turnaround at Milwaukee-based Fortis Health (which later became Assurant Inc.), involved consolidating underwriting and claims systems following a merger, a project that had already failed once.

Jones oversaw a move to a third-party claims-processing system, created an enterprise project office and outsourced data center services. He also reinvigorated an IT staff of 275 that had been perceived as unresponsive. "I found my direct reports to be good people who had been underutilized," he recalls.

Jones established a competency-based review system with metrics for each position. His team built an interactive online appraisal program that included a self-appraisal and a manager appraisal. "It had the desired results," Jones says. "Low performers chose to leave. Those who stayed sought to improve."

PHOTOILLUSTRATION BY WILLIAM DUKE

CHANGE THE IT MIND-SET

WAYNE SADIN HAS MADE a career of fixing IT departments in the financial services industry. At Houston-based Bank United — "a bunch of failed Texas thrifts that were merged together" — his biggest challenge was to develop an e-commerce strategy. Sadin says he had one year to complement the bank's traditional delivery channels with Internet, e-mail and call centers to improve customer service and cut costs.

Like Knecht and Jones, Sadin typically brings along a team of loyal lieutenants who have worked with him before to create an enterprise architecture and work on alignment. The existing IT management team usually moves one level down. "They generally know something is wrong, even if the former

WAYNE SADIN

CIO, Aegis Mortgage Corp., Houston, 2004-2006

CIO, Bank United, Houston, 1998-2001

CTO and director of IT, Michigan National Bank, Lansing, 1992-1998

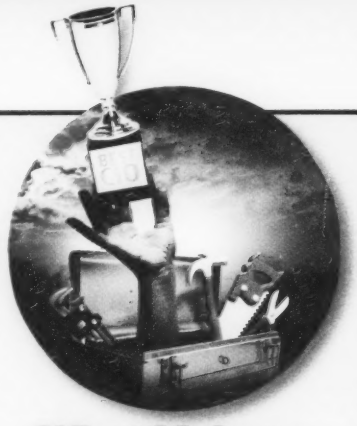
CIO didn't," he says. "I get them to stop talking about users and start talking about clients or customers."

If IT staffers are responsible for mainframe applications or the network, for example, Sadin adds a business unit like retail banking or human resources to their responsibilities. "They get stuck thinking in terms of technical stacks that don't match up with the business," he says. "I put them in charge of a business group of customers and tell them to go make friends and develop contacts."

Sadin says a turnaround CIO should sit on the executive committee but do more listening than talking. And even though he may have a very short-term focus, it is still important to build relationships with other leaders. "The key is to understand what they're thinking," he says. "If you don't know why they're doing what they're doing, you will always be playing catch-up."

Jones adds that listening for conflicts among senior executives is key to prioritizing activities at the beginning of a turnaround. "Often after a merger, you have a lot of finger-pointing and an 'us vs. them' mentality," he says. "It's critical to understand which [of the] decisions they can't agree on are going to have serious technical consequences and which aren't. Some things can be allowed to fester, while others have to be resolved."

Turnaround CIOs also have to be able to shoot down unrealistic proposals. Sadin recalls an experience at booming subprime mortgage lender Aegis Mortgage Corp. "We were growing so fast, they asked if we could spend $10 million and add 100 more people right away. I had to tell them we couldn't absorb that kind of growth right away without getting dysfunctional."



What Makes a Turnaround CIO?

Companies "want to have their cake and eat it, too," says Marc Lewis, CEO of Westport, Conn.-based Leadership Capital Group LLC, an executive search firm that has placed several turnaround CIOs in large corporations.

What does Lewis look for in a turnaround artist? Agility is key, he says. Candidates must be able to work in companies of various sizes across a range of industries and geographies. From the outside, he says, past success is the best indicator of future performance, so companies looking for a turnaround CIO "would like to see some notches on the belt, and preferably more than just one."

From the inside, turnaround CIO Roger J. Jones says it's important to be a quick study and to be decisive. "You have to make quick decisions and accept that you're going to get some of them wrong," he says.

It also takes a different career perspective. Jones and his peers "don't have careers," he says, "just a series of assignments with freelance consulting jobs in between."

– DAVID RATHS

BUILD DISCIPLINE; SHIFT PRIORITIES

WHEN HE JOINED Blue Cross Blue Shield of Wisconsin in 2000, Knecht had to deal with a chargeback system that was broken and an IT group that was $8.6 million over budget and didn't deliver projects on time. "No one had respect or confidence in IT," he recalls.

Knecht implemented an IT project/resource-tracking system that fed the chargebacks into a PeopleSoft financial system. He reduced the budget by 20%, and in 2001, he eliminated the IT group's deficit for the first time in five years.

And as he had in earlier turnarounds, Knecht shifted IT's priorities temporarily. "I freeze the funding on low-priority maintenance projects and apply those resources to more significant projects that will make a difference," he says.

Usually, he says, it takes about a year for executives to notice that IT is starting to deliver on its promises. "Once we get to that level of predictability, then we have line managers eager to come to us with a second tier of strategic issues they'd like worked on," Knecht says.

TERRY KNECHT

CIO, The University of Iowa Foundation, Iowa City, 2004-present

CIO, Blue Cross Blue Shield of Wisconsin, Waukesha, 2000-2002

CIO, United Payors & United Providers, Rockville, Md., 1997-2000

CIO, Lexi International, Los Angeles, 1995-1997

At that point, he gets funding to deal with those strategic items and turns to the lower-priority maintenance items. "By that time," Knecht says, "I'm almost ready to declare victory and leave."

And unlike "caretaker CIOs" in stable situations, turnaround CIOs start thinking about successors very early in their tenures. Jones says that sometimes a CEO will tell him that he has a few really good people in IT and that if it were a stable situation, he would promote one of them to CIO. "That is nirvana for a turnaround CIO," he says, "because you can probably trust their opinion and you can start grooming [the candidate] to ultimately take on that role." ■

Raths is a freelance writer based in Philadelphia. Contact him at draths@mac.com.

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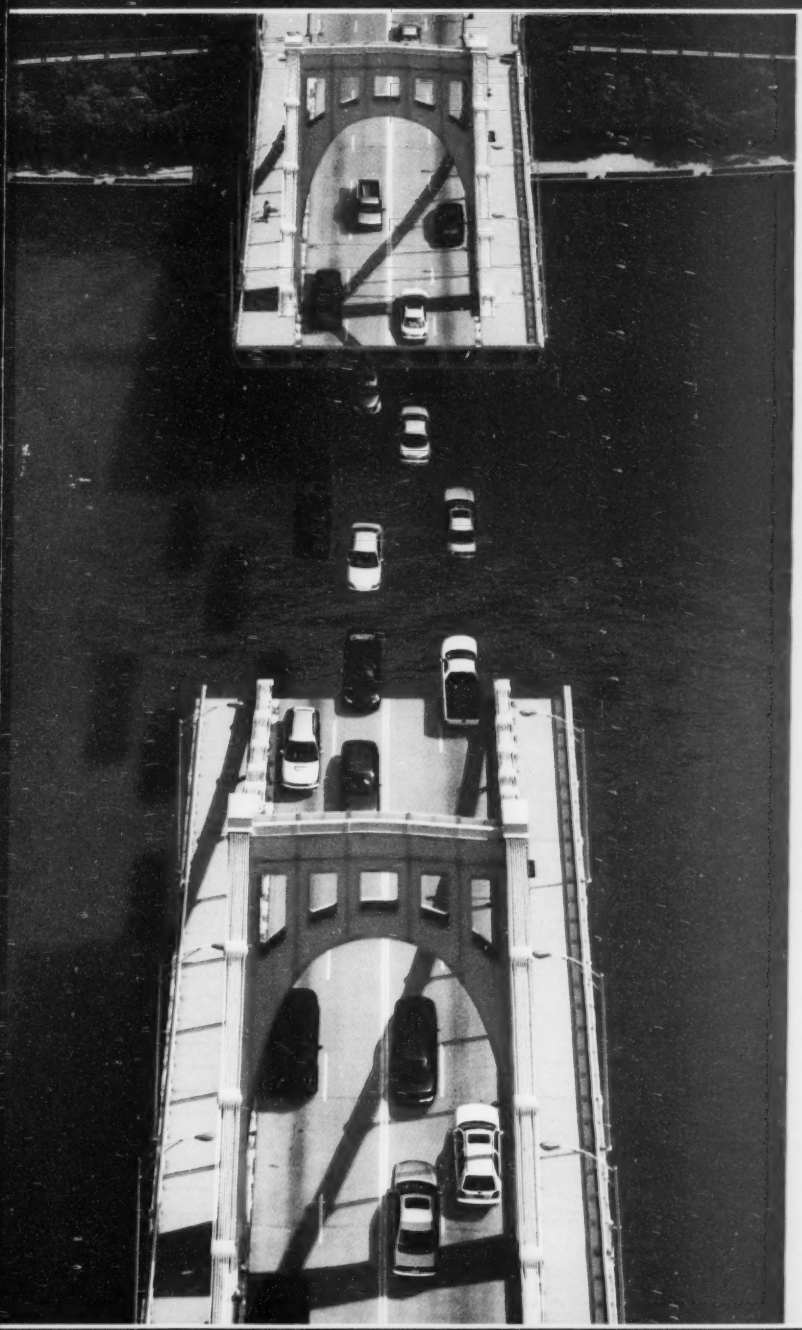

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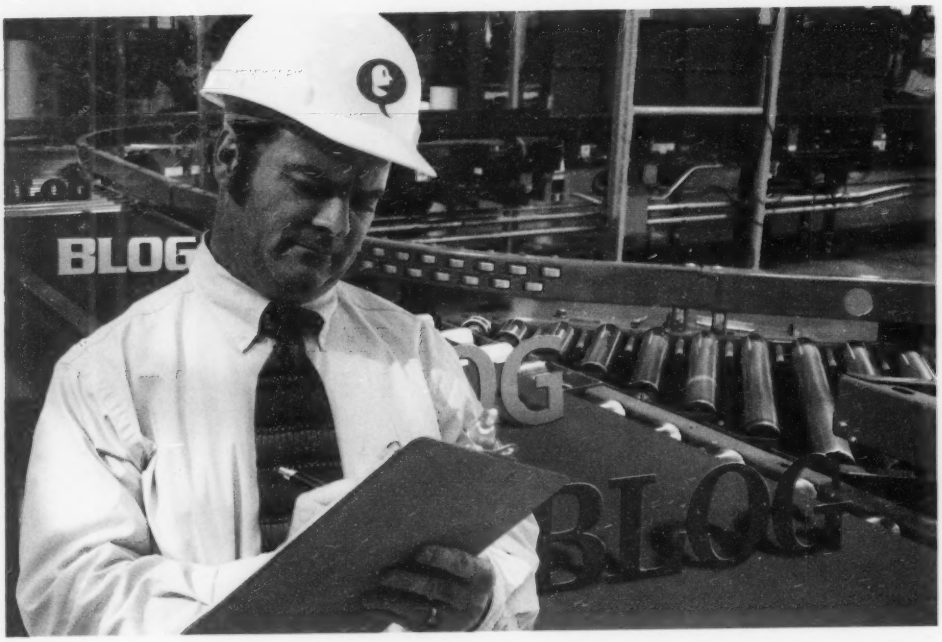

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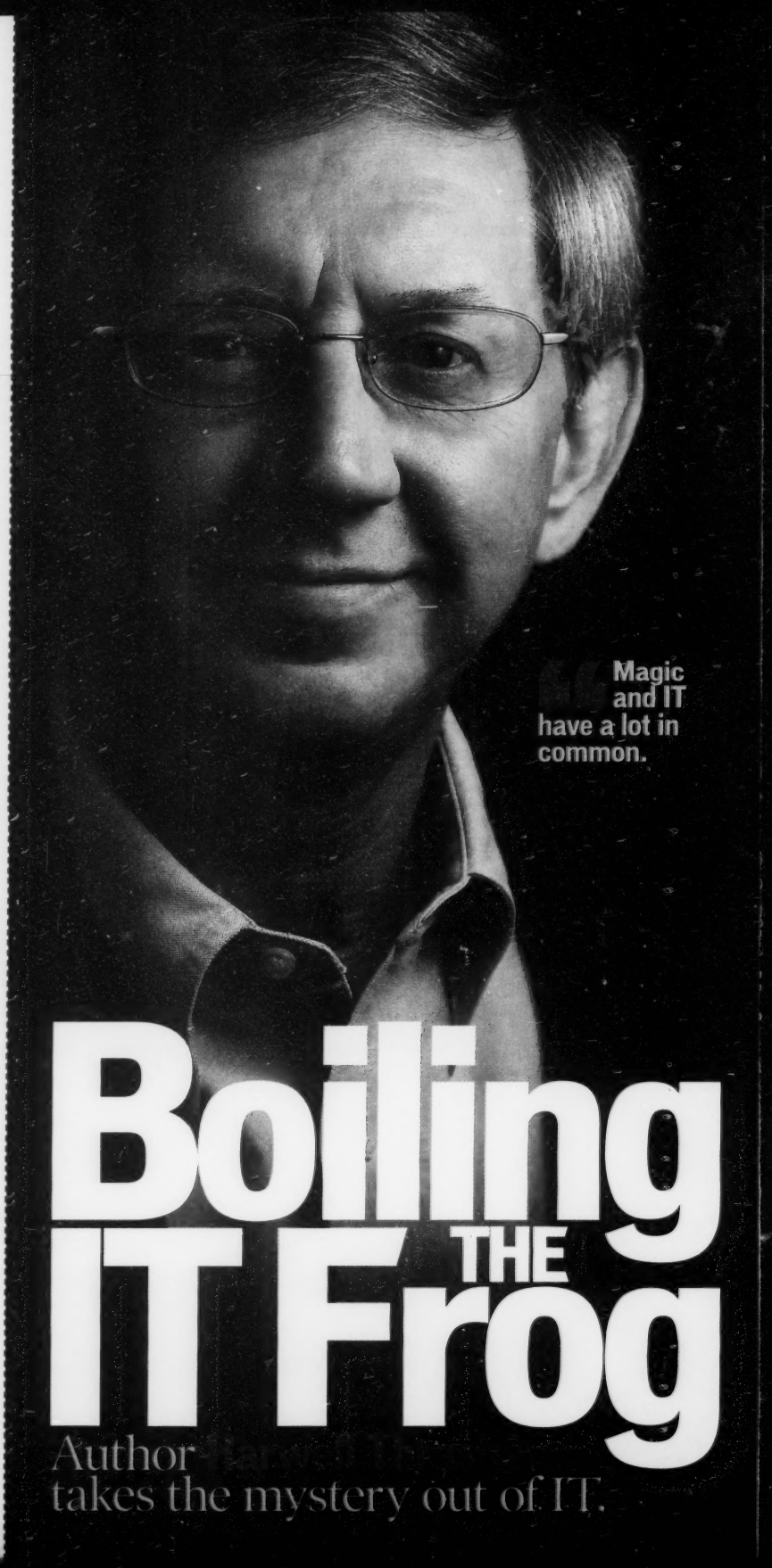
Boiling THE IT Frog

Author takes the mystery out of IT.



Harwell Thrasher *is an author, speaker and coach specializing in the human side of IT. His Web site is MakingITclear.com. He talked with Kathleen Melymuka about his new book,* Boiling the IT Frog, *which aims to clarify IT for business people who really don't understand it, and to help IT professionals who understand it completely but don't know quite how to explain it.*

What does the book's title mean? According to a myth, if you put a frog in boiling water, it will hop out, but if you put it in a pot of water at room temperature and gradually heat up the water, the frog will become accustomed to the increasing temperature and stay in the pot until it's cooked. Change agents use this myth to describe how organizations get into situations that they would never tolerate if they knew the final result in advance. That's what has happened in IT. Business people would never tolerate the current state of IT if they could see where they were headed, but they got used to things gradually.

You write that magic in IT isn't a good thing. What is magic in IT, and why isn't it good? This idea came from an Arthur C. Clarke quote, "Any sufficiently advanced technology is indistinguishable from magic." Magic and IT have a lot in common. Magic has strange words: abracadabra, hocus-pocus. We in IT have SQL, ERP, SOAP. Magic has this inherent idea that you see things that happen and you don't quite understand why but you know they do, so you suspend logical thinking. Business people tend to regard IT as something magical, and so they don't apply their own logical thinking. This suspension of logic is why business has so much trouble with IT. It creates unrealistic expectations.

There's also the concept of the wizard in magic: people who can do magical things. In business organizations, there are wizards — users who have gotten good at an application. And in IT organizations, there are wizards too. The wizards want to keep systems

the way they are to maintain their wizard status. As a result, you get stuck with a system that doesn't get better.

You say that without trust, IT is useless. Why? And how do you establish trust? Business people will never have the detailed understanding of technology that IT people have. But the business people need to feel that the right technology decisions are being made. That's where the trust comes in. Without trust, business people keep second-guessing everything the IT organization does, and IT can't be successful.

You establish trust by agreeing on common objectives and goals and having consistency in how you communicate with each other. Both sides do what they say, and say what they do.

Why is using return on investment for project selection a ticket to failure? Most people would agree that the right projects are those that are in the best interest of the company and make the most strategic sense. But there are two fallacies in using ROI to choose your projects. First is that the project with the highest ROI is best for the business. That's not necessarily so. For example, a high-ROI project may make a process more efficient by making it more rigid, when what you really need is for it to be more flexible. The second fallacy is that you can compare the ROI of project proposals. Those who write proposals tend to overstate return, understate expenses, minimize transition costs and dependencies on other projects, and neglect risk. So the project with the highest ROI on paper tends to be the one with the most creative proposal writer.

Why do most projects fail? In my experience, there are six primary reasons. First, you're doing the wrong project — it's not what the business really needs. Second, you're missing prerequisites in the proposal. You start and then realize you have to beef up the infrastructure, for example, so you're in trouble right from the beginning. Third, you're going for home runs instead of base hits; for example, a global rollout of a major system instead of chipping away at it a little at a time. Fourth, the project's duration is greater than the job tenure of the sponsoring executive. If the project isn't completed before he or she leaves, you may be in deep trouble with the successor. Fifth, you gather requirements instead of negotiating them. If you go around asking all the stakeholders what they want and your project goal is the sum of all those things, you will undoubtedly have contradictions — for example, a simple system that must do everything. Sixth, there's not enough contingency planning. You've got to anticipate things that can go wrong and take them into account in your plan.

Why is it that adding more resources to an IT project that's running late can make it take even longer? Usually, when we talk about adding resources, we're talking about adding people, and adding more people requires more coordination. You have to rearrange the tasks being done and break them up in different ways. Reallocation of resources takes resources in itself. Also, you would probably have assigned the best people to begin with, and now you're adding people who may not be the best, so you have to manage subpar performers. ■

Where IT Goes Wrong

IT PEOPLE are very focused on the how, not on the what. The most common mistakes they'll make are errors caused by doing the wrong things, not by doing things wrong.

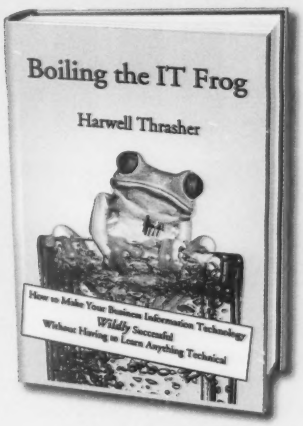
Tell IT people what you want to do, and you can almost see the gears turning in their heads as they evaluate alternative approaches and eventually come up with various options on how to accomplish your goals. IT people are so focused on the how, in fact, that the most common mistakes they'll make are errors caused by doing the wrong things – not by doing things wrong. That's why an IT strategy is so important to a business; it's the only way to be sure that your IT organization is headed in the right direction.

In Chapter 2, I compare IT people to medical doctors, and in fact there are many similarities:

- **Both have in-depth knowledge of a technical specialty that goes beyond the knowledge held by everyone else. Both groups have to struggle to keep up with changing technology, techniques and best practices.**
- **Both groups are on call to handle problems 24 hours a day, seven days a week.**
- **Both use a different language that can intimidate outsiders and act as a barrier to communication.**

Some of the worst difficulties in communicating with an IT organization are caused by differing definitions of nontechnical words. For example, IT people frequently use the word *project* to mean the software development part of a larger "Project" that includes everything necessary for the business deliverable: design, building, testing, documentation, training, implementation and infrastructure additions. Thus the completion date for a project may be viewed by IT as the completion of the software work. If you don't clarify the deliverable, then there will be a huge misunderstanding.

Similarly, an IT organization might commit to have some work done by the third quarter. The IT customer will assume this means July 1, but the IT organization will assume it means Sept. 30 at midnight. ■


Boiling the IT Frog
Harwell Thrasher
How to Make Your Business Information Technology Wildly Successful Without Having to Learn Anything Technical

Adapted with the author's permission from Boiling the IT Frog, *by Harwell Thrasher (BookSurge Publishing, 2007).*

"There was a lot of community outreach," says Barbara Dolhansky, associate vice president of computer systems at Temple University.

ID Confidential

In a massive conversion effort, Temple remodeled its student identification system.

By Monica Sambataro

COLLEGE and university systems can be prime targets for identity thieves and hackers — think open computing environments in which students freely download files, interact on social networking sites and use peer-to-peer applications.

To reduce the risk of personal data being exposed, Temple University in Philadelphia launched an initiative three years ago to eliminate the use of Social Security numbers as a primary means of identifying students and staff.

"People aren't expecting to see their Social Security numbers anywhere today," says Barbara Dolhansky, associate vice president of computer systems at the university.

But in a sprawling environment such as Temple's, identifying every point at which that information was being collected and stored was no easy task.

The public research university has 17 schools and colleges spread over four city campuses and several suburban campuses and education centers. It also includes the Temple University Health System, international campuses in Tokyo and Rome, and programs in other overseas locales.

Temple University
Philadelphia

- IT department: 275
- Number of IT staffers on TUid project: 85; 40 users actively involved
- New IDs issued: About 45,000
- Length of project: 18 months
- Web site: www.temple.edu

Over a million records in Temple's mainframe had to be converted to new unique identifying numbers, called TUids. On top of that, dozens of ancillary systems and hundreds of programs, forms and interfaces had to be modified.

Although it required thousands of hours of systems conversion work and testing, the 18-month effort had more to do with changing business processes than with technology, Dolhansky notes. Close collaboration between IT and business unit leaders and a high-profile campaign to educate students

and staffers on data security were key to the project's success, she says.

Here's a look at Temple's ID conversion plan.

STEP 1: SET POLICY

The project's steering committee first had to nail down policies on the proper use of Social Security numbers. Although the committee was led by IT, the majority of its members were heads of the departments that would be most affected by the change, Dolhansky notes.

"At the time, there was a lot in the media about identity theft, so no one was resistant," says Nancy Hinchcliff, Temple's assistant vice president of human resources payroll management.

The committee determined which departments could or couldn't ask for Social Security numbers and developed a process for handling the numbers in cases where they would still be required, such as for student financial aid, employee benefits and tax purposes.

"Departments had to come forward and explain whether they needed to collect and store Social Security numbers — and explain why," Dolhansky says. "We had to make sure that information was being handled consistently universitywide."

Gartner Inc. analyst Avivah Litan says Temple took the right approach in switching to the new TUid numbers rather than just encrypting Social Security numbers. "If you just encrypt, you still have to have access control," she explains, adding that encryption can also create performance problems.

Brian Forman, director of application systems at Temple and the TUid project manager, says those issues were partly behind the university's decision to institute the new ID numbers. But the main goal, he says, "was to eliminate the use of Social Security numbers in the day-to-day business at the university."

STEP 2: GET THE WORD OUT

To raise awareness about data security and the ID conversion process, a communications team launched a media blitz: It built an informational Web site; distributed pins, pamphlets and other materials; and set up mandatory training for faculty and staff.

The Web site — which introduced the TUids with the slogan "There's safety in numbers" — included Temple's new data protection policies, FAQs for students and employees, a conversion preparation checklist, encryption guidelines and a distribution schedule for the new ID cards. As an extra measure, IT representatives met with all departments to make sure staffers were on board.

"There was a lot of community outreach," Dolhansky says.

STEP 3: BREAK IT DOWN

A large project team, broken down into half a dozen or so groups, tackled the systems work.

A forms team identified where Social Security numbers were being collected. It worked closely with the steering committee on crafting usage policies. A process group reviewed all interfaces to determine if they contained fields for Social Security numbers. And the conversion team was responsible for converting Temple's legacy records, dating back to 1963 for students and 1983 for employees.

Another group was in charge of reissuing ID cards to students and employees of the university and health system — a total of some 45,000.

Says Dolhansky, "The difficult part was cleaning up the ancillary systems and making sure departments got rid of spreadsheets and databases that contained Social Security numbers."

To do the conversions, departments uploaded their files to a secure Web site where Social Security numbers were matched and TUids were added as another field to the files. When the conversion files were complete, the departments received e-mail notifications. They then went back to the site to retrieve the conversion files and used them to update their systems.

Another challenge, Forman notes, was to make the process of matching records and assigning new TUids as user-friendly as possible so that multiple records wouldn't be created for the same person.

"There was a little bit of a learning curve," says Hinchcliff. "We had to have procedures in place to get the new TUid numbers."

Although the total cost for the project isn't available, Dolhansky estimates that all of the system modifications, which were done entirely by Temple's in-house IT team, consumed about 15,000 man-hours. But with the threat of fraud and identity theft increasing, "everyone knew we had to do this," Dolhansky says. According to Javelin Strategy & Research's 2007 fraud survey, 8.4 million U.S. adults fell victim to identity theft in the past year, with one-year losses from fraud totaling $49.3 billion.

STEP 4: FLIP THE SWITCH

The IT team shut down Temple's systems during the July Fourth weekend in 2005 and, with fireworks going off overhead, began the process of deactivating all of the old ID numbers and migrating to the TUids.

"In order to guarantee mission-critical systems were running properly, we worked for 48 hours straight and tested everything," Dolhansky says. "Nurses, for example, needed to enter maternity wards. All of those systems had to have minimal downtime."

At the same time, the team had to monitor university sites overseas, which, she notes, were not shut down for the U.S. holiday. "We kept our fingers crossed," Dolhansky says. "We didn't know if we had heard from everyone."

But aside from lightning blowing out a parking lot card reader, the conversion went off smoothly. Without incident, students and employees began using their new IDs — which also serve as debit cards — to buy meals, enter buildings, park their cars, check out library materials and purchase goods.

Although it must have been "a massive undertaking," says Eugene Kwatny, professor of computer and information sciences at Temple, the transition was "almost transparent" for members of the university community.

"All of Temple's suborganizations had been part of the process," Kwatny says, "so when it happened, we didn't notice aside from the fact that we had new ID cards with TUid numbers."

Gartner's Litan says Temple was "definitely ahead of its peers" in its effort to eliminate the use of Social Security numbers, noting that "90% of organizations that need to do this haven't done it yet."

"Most attempts to protect data have been around credit card numbers," she says. "There are hardly any controls around Social Security number use." ■

SOCIAL NETWORKING: Not IT's Problem

IT shouldn't play the role of blog police. By Sandra Gittlen

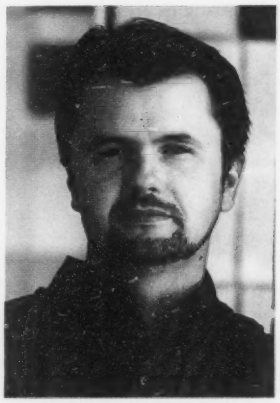
JIM KLEIN and his IT team recently rolled out social networking tools, including blogs, to the faculty, students and staff in California's Saugus Union School District.

But Klein, who is director of information services and technology, didn't want IT to become the blog police. To avoid that, he put controls in place so that both IT and the school district are protected from users running amok.

"The way we handle it is that if a business unit wants to start blogging, then a leader has to manage those blogs," he says.

For instance, if a teacher wants his students to communicate via the school's Web site, then that teacher has to approve all the content being posted. That way, Klein says, "IT does not get put in the line of fire."

Klein's precautions are right on target, say experts in social networking technology. For the tools to be successful, they say, the buck has to stop somewhere other than IT. "Social networking is more than just operations; it's community development. Therefore, IT should not be in charge of it," says Rachel Happe, an analyst at market research firm IDC.



"IT does not get put in the line of fire."

JIM KLEIN, DIRECTOR OF INFORMATION SERVICES AND TECHNOLOGY, SAUGUS UNION SCHOOL DISTRICT

Happe says that as companies latch on to social networking tools such as blogs, wikis and user-driven content sites, they must allocate human as well as IT resources to manage this new frontier. "There is tremendous value to be gained from social networking tools," she says. "But you need to make sure that there are people responsible." Failure to do so puts the organization at risk of being held responsible for malicious behavior and even vulnerable to lawsuits.

"Organizations have to manage the technology or it will come back to hurt them," Happe warns.

PLAN AHEAD

Many companies implement social networking technology without much planning, says Klein. "Someone says, 'Hey, let's do a wiki.' Then something goes wrong, and they say, 'We should have thought about that,' " he says.

Klein spent several months planning all aspects of the Web site and the content management system, which are the backbone of the school district's social networking effort. He says the first step was to figure out a way to check content as it flows from the user to the Web. Klein's system, which is Web-based, open-source and homegrown, alerts the community leader when there is content for him to approve.

At Saugus Union, users also help police the site. The system enables them to flag things they deem inappropriate, immediately notifying community leaders and IT. "It comes to the top quickly, and we can go in and manage it," Klein says.

Another key element is that leaders and users must be clear about community expectations. "It's up to the community to define its norms," says Gina Bianchini, co-founder and CEO of Ning Inc., a maker of social networking applications.

Klein researched his district's rules of conduct, as well as state and federal guidelines and IBM's blogging policy, before developing an acceptable-use policy. It covers text, video and other multimedia materials.

But posting the policy isn't enough, Klein says. Saugus Union does a twice-a-year seminar for students, faculty and staff on the benefits and limitations of technology, including social networking tools. "We explain copyright laws and other restrictions," he says.

IT can help curb bad behavior by employing authorization and authentication controls to render social networks private. "Private means 'members only,' so you can control membership upfront as well as moderate content before it is posted," Bianchini says.

You can also delete anything inappropriate, ensuring a level of privacy and control that isn't possible on public sites, she says.

"This makes people less anonymous and makes them behave," Happe says. And if users don't behave, you can take away their privileges. ■

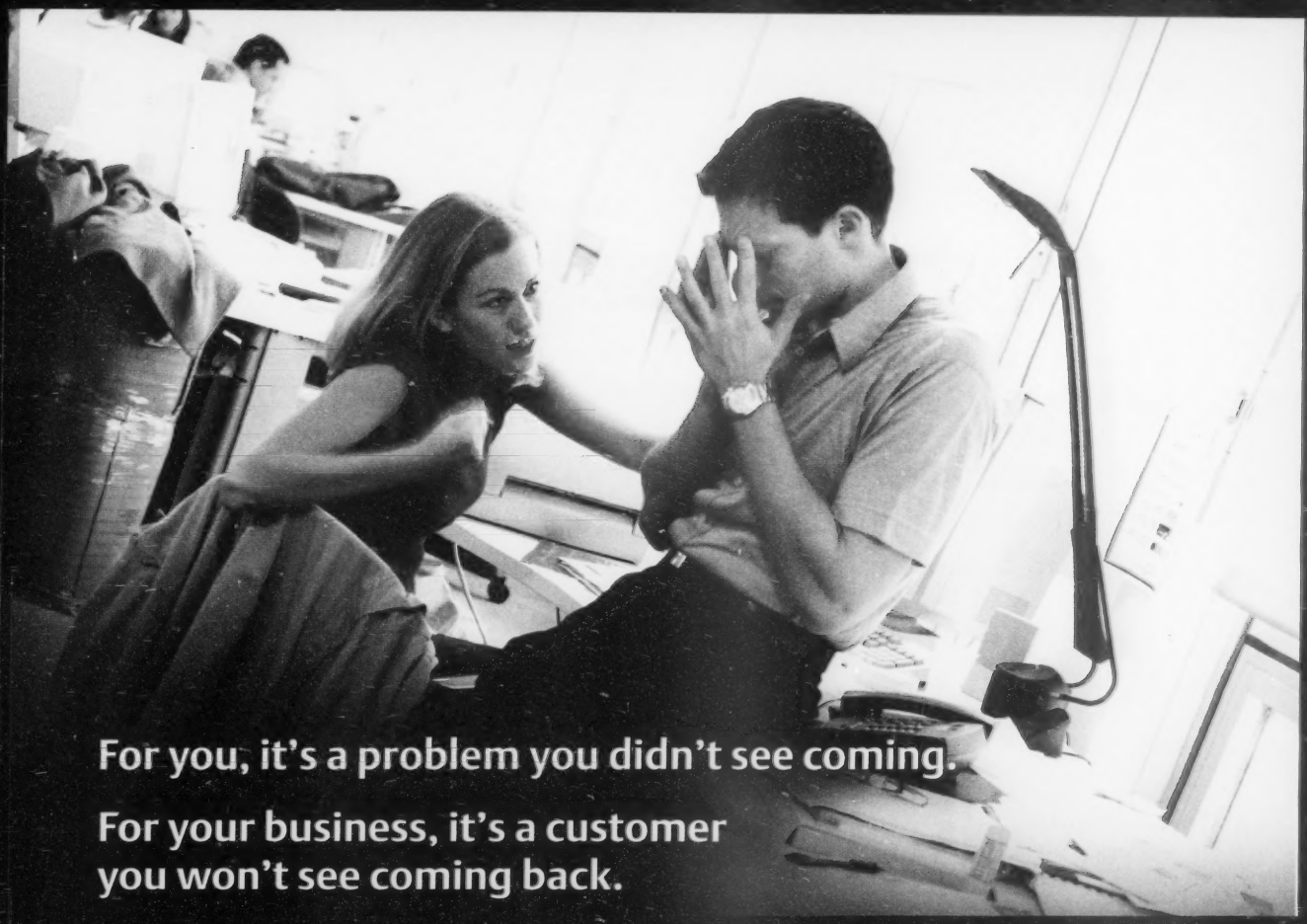
Gittlen *is a freelance technology editor near Boston. Contact her at sgittlen@charter.net.*

Respect and Responsibility

A perusal of corporate blogging guidelines at IBM, Yahoo Inc. and other companies reveals two essential foundations:

RESPONSIBILITY: Understand and follow corporate communication rules. Maintain confidentiality as required. Identify yourself and your role. Clarify that these are your views, not the company's. Get your facts straight, provide context, and admit and correct errors.

RESPECT: Treat colleagues, subjects and readers with respect. Use good judgment and good taste.



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Proud C.J. Keeps On Working

Our security manager's pride makes her want to do it all herself. But **consultants could be the answer** this time around.

IT'S BEEN like Christmas this year in the security lab. We were able to purchase all the technologies we had planned on.

That's unusual, because IT and security equipment is expensive, making our budget one of the largest in the agency. We don't always get the things we want, and sometimes we can't even get the things we think we need.

Even better, though, we just closed the fiscal year with excess funds that had to be spent, and I was given first dibs. I took advantage of the opportunity by purchasing equipment that was not budgeted until fiscal 2008.

That means I have extra money in the current budget, which presents an intriguing dilemma regarding the limits of my staff and my own time.

In my previous jobs, the types of projects that are under way right now at the agency were staffed with several security engineers. But here, I'm it.

Now, that's something I don't really mind. In fact, I've written before about my belief that it's beneficial for technical managers to work alongside their staffs on critical projects — a belief that's strongly opposed by virtually all management gurus and supported by about half of the readers who have taken the time to write to me on this topic.

It has been my experience that technical people want technical managers who understand what they are talking about and can offer assistance from time to time.

■ I have extra money in the current budget, which presents an intriguing dilemma regarding the limits of my staff and my own time.

Then there's the fact that I don't have anyone on staff with the level of expertise necessary to successfully complete these projects. I am grooming two senior people to take over once these projects go into the maintenance phase, but I have to wonder what will happen in the interim.

It would be a huge relief if I could use some of that extra money in the budget to hire consultants. The only obstacle might be my own pride.

ME, ME, ME

I want to be able to say, "Look at what I did!" Like a lot of people who work in IT, I take a lot of pride in what I accomplish professionally, and it's humbling to say I just can't do it all.

But when I'm not blinded by my pride, I can see that it's impossible to do everything I'd like to. I took a swipe at planning the projects through the next year. It's all doable — if I and the rest of the staff don't take any vacations or have any family emergencies for the next 12 months. But we live in the real world, of course, and we all have real families and real obligations to them, and so the schedule needs a dose of reality.

At this juncture, I could rewrite the master project plan to take us out over two years instead of one and still do all of the work myself. Or I can figure out how to bring in some consulting services for my most complicated security projects.

When pride comes up against that kind of timeframe reality, it takes a fall. I'm going to see whether we can really manage to contract with some consultants. ■

This week's journal is written by a real security manager, ***"C.J. Kelly,"*** *whose name and employer have been disguised for obvious reasons. Contact her at mscjkelly@yahoo.com.*

Trouble Ticket

AT ISSUE: With resources stretched thin, too much work lands on the security manager's plate.

ACTION PLAN: Some extra money in the budget makes using consultants a real possibility.

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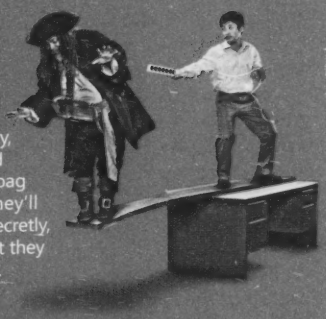
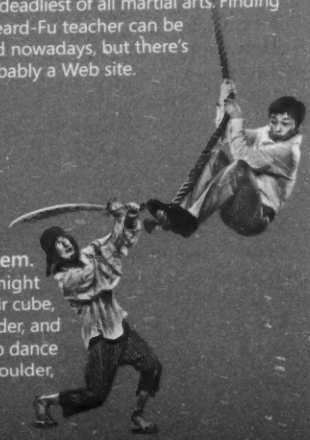
2. Walking the plank.
Pirates are big on getting their victims to walk the proverbial plank. Use this against them. Pose as a plank salesman; pitch a new, better plank. Ask them to "test the plank" and, once they're out on it, reveal the truth. The humiliation might just get them to leave.



3. Pay them off.
Pirates are obsessed with booty, or treasure. A supply of gold chocolate coins placed in a bag or chest will dazzle them. They'll want to bury it somewhere, secretly, and will lose whatever interest they had in you in the first place.

4. Use your skills of Beard-Fu.
Beard-Fu is the ancient art of facial hair combat. Grab and pull the Pirate's beard, yank a sideburn—if done properly, it's the deadliest of all martial arts. Finding a Beard-Fu teacher can be hard nowadays, but there's probably a Web site.



5. Beat them, then join them.
Life as a high-seas scalawag might not be so bad. You'll escape your cube, see the world, pillage and plunder, and have a grand old time. Learn to dance a jig, wear a parrot on your shoulder, and you're off.

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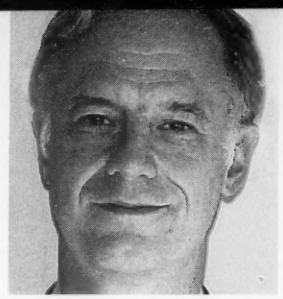
■ OPINION

Bart Perkins

The Broken Process Dilemma



FIXING a broken process is often difficult, expensive and thankless. IT executives are divided on whether to outsource a broken process (e.g., payroll, help desk, accounting) or fix it in-house first. Some feel that outsourcers specialize in specific processes and therefore prefer to let the outsourcer fix what's broken. Others claim that after a broken process is outsourced, it often remains broken.

This view advocates fixing processes before outsourcing. There are good arguments on both sides.

Here's why you should let the outsourcer fix your process:

Expertise. Good outsourcers strive to make processes as efficient and effective as possible. They have state-of-the-art tools and metrics, as well as experienced staffers. They understand how to migrate customers' processes efficiently. One Fortune 500 company tried unsuccessfully to fix its payroll system for 10 years. When it finally outsourced, the new system was up and running in six months.

Impartiality. Your outsourcer functions as your business partner, but it's not part of your organizational hierarchy and is minimally affected by your corporate politics. This allows the outsourcer to make unbiased decisions regarding your processes. The outsourcer's staff is paid and promoted by its own management. And subpar performers can be removed easily.

Speed. In most cases, outsourcers can fix broken processes more quickly than you can. Contracts frequently offer outsourcers incentives for speed and effectiveness, and these bonuses are often collected. (Even if repairing the broken process is not specified in the contract, most outsourcers use their standardized procedures wherever possible to reduce their own costs and speed schedules.)

Political advantage. If you expect strong resistance to changing a corporate process, it may be expedient (and less painful) to let the outsourcer take the heat. This saves your political capital for future issues.

But there are reasons to fix your process before outsourcing:

■ In most cases, outsourcers can fix broken processes more quickly than you can.

Savings. Streamlined processes usually cost less to operate than broken ones, and whoever fixes the process reaps the savings. One Fortune 500 company outsourced its financial systems, which had been costing it $10 million annually. The outsourcer streamlined the process and reduced costs to $4 million per year. Since the contract didn't require it to share any savings, the outsourcer pocketed the profits.

Contract terms. Broken processes need to be improved or redesigned. However, since the future process is rarely detailed in time for contract negotiations, it is difficult to specify contract terms covering the new process and appropriate metrics. This often leads to misunderstandings later.

Resource protection. Outsourcers serve many clients and have their own priorities. Understandably, larger accounts get more attention. Using your own staff to fix a process protects you from losing the resources your project requires to higher-priority client.

Internal corporate knowledge. You know your company better than any outsider. No matter how well intentioned an outsourcer is, it's often unfamiliar with your corporate culture and the day-to-day workings of your company. This knowledge — or the lack of it — significantly affects the design and adoption of new processes.

Companies sometimes feel forced to outsource broken processes because they lack staffers with process expertise. One effective alternative is to hire an outside firm (specializing in process redesign) to fix the process before it is given to your outsourcer. Such firms are not inexpensive, but their services represent a one-time cost. In return, your annual outsourcing costs will be reduced because of the lower cost basis of the streamlined process.

Depending on the situation, there are valid reasons for either approach to fixing broken processes. Don't be tied to one camp or the other, and be prepared to switch sides if circumstances warrant it. ■

Bart Perkins *is managing partner at Louisville, Ky.-based Leverage Partners Inc., which helps organizations invest well in IT. Contact him at BartPerkins@LeveragePartners.com.*

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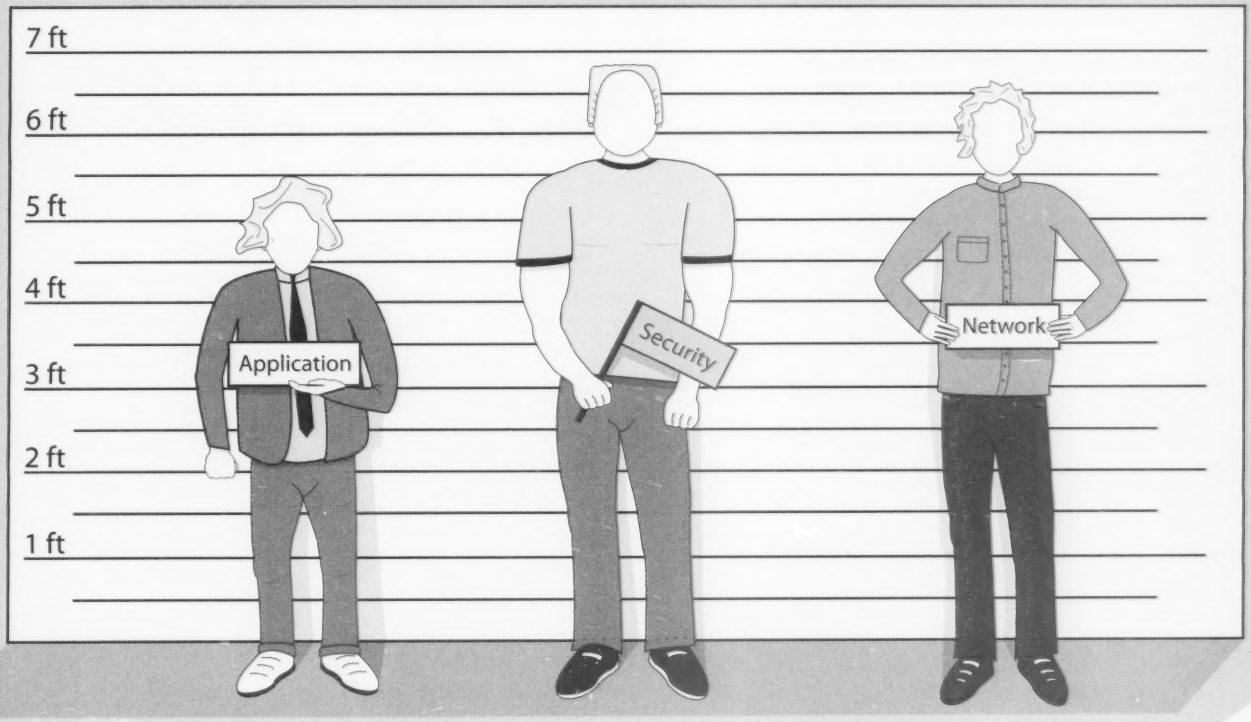

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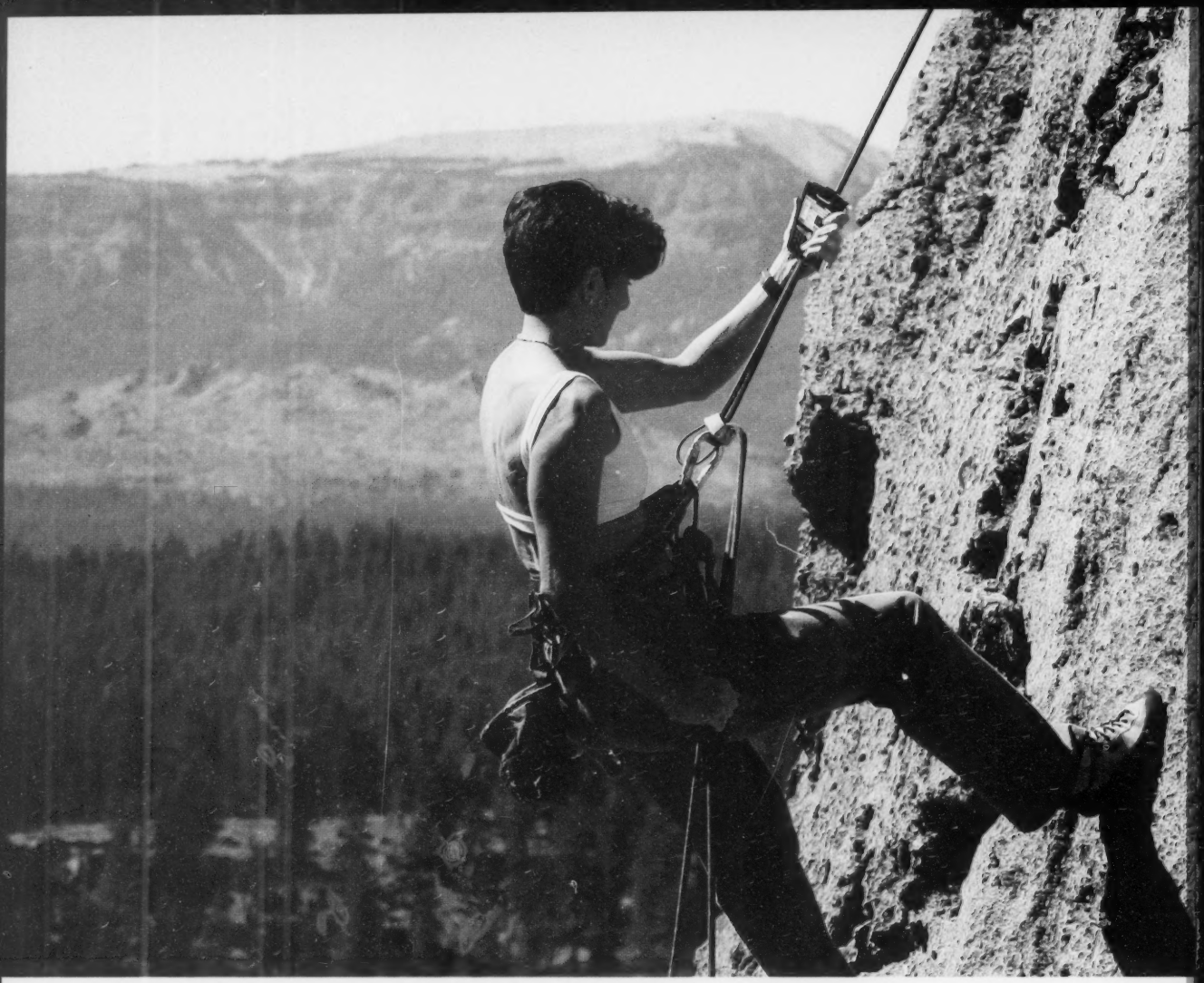

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Career Watch

Service = Survival

BY ANITA LETO

With internal IT no longer the only game in town, forward-thinking IT professionals increasingly see good service as their key to longevity.

So try applying this to your own organization. When clients approach you with a request, do you tell them it's not your area, or do you look up the name of the person who can best help them? When you're planning an upgrade, do you schedule it at a time that's convenient for your clients, or a time that's convenient for you? When a client expresses interest in a new product, do you say it's not a supported platform, or do you begin a dialogue to find out how you *can* help?

A shift to a service mentality has to be cultivated, with planning from the top down. Here are some strategies:

■ **DEVELOP A "WE" MINDSET.** Both internal IT and business clients have a vested interest in doing the best job for the company. There's no room for "us vs. them."

■ **LOVE COMPLAINTS.** Complaining is often a business person's only form of communication with IT, so encourage it. It's a learning opportunity – our chance to get it right.

■ **MAKE EVERY INTERACTION COUNT.** Clients form impressions every time they encounter the IT group, whether they're upgrading a laptop or clicking on the self-help Web site. Each one of these interactions should be considered a "moment of truth" – a key event that can turn the client's impression positive or negative.

You should also keep in mind what a good approach to service is not:

■ **SUBSERVIENT.** The goal is to convey a willingness to serve, not to be an order-taker.

■ **INSINCERE.** Don't be like the store checkout clerk who asks robotically whether you found everything OK.

■ **INCONSISTENT.** Being helpful to just a handful of users won't save internal IT from being outsourced.

ANITA LETO *is a senior consultant at Ouellette & Associates Consulting Inc. in Bedford, N.H., and a co-author of the book* The IT Professional of the Future, *due out in the fall.*

PAGE COMPILED BY JAMIE ECKLE.

■ **Q&A**

Darryl Solie

This **IBM** distinguished engineer is involved in an effort to promote closer teamwork with customers in the early stages of product development.

How different is your work as an engineer from when you started 30 years ago? For 24 years, I only worked with IBM colleagues, and the scope of my job was just technical. Today, I am still doing deeply technical work, but I'm involved with clients face to face. It brings on a whole new set of challenges, but I see this as stimulating in that my learning curve remains very, very steep.

What have you learned by working closely with customers? The most valuable thing I've learned is how to effectively engage clients in collaborative innovation. It is very educational and rewarding to help clients transform their products to produce dramatically improved business results. On a personal level, the most fulfilling aspect is to think that, in a small way, I may have helped save lives through technology innovation such as the work IBM is doing for the medical industry.

How did you accommodate the shift in focus? I had to listen better so I could figure out quickly what was being discussed and where it might be going. Moving from an internal, product-centric environment to an external, services-centric environment was a big transformation. To build trust with a client, you need a solid set of interpersonal skills such as good communication and a willingness to admit when you aren't able to do something. I don't know how anyone trains for this, except by trial and error.

Please complete this sentence: When I was a young engineer, I never thought I would . . . Use a high-performance processor chip designed for a video game console to build revolutionary solutions that might help prevent people from undergoing unnecessary biopsies for possible cancer lesions.

– JAMIE ECKLE

Working Blindly

What would have helped most in your last job transition?

Clear performance expectations	52%
Better role models in the organization	45.5%
Formal training	42%
A boss more focused on my development	40.5%
Better self-awareness	39%
Support in creating a network	38.2%
Intercultural sensitivity	25.2%
International experience	21%

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See Frank Abagnale

The world's foremost authority on fraud and identity theft, and the inspiration behind the now-classic book and film, "Catch Me If You Can," Frank Abagnale, is the "con man who came in from the cold," agreeing to help the FBI as an expert on fraud, after a five-year prison term. Abagnale's lecture was hailed by Tom Hanks as "the best one-man show you will ever see."

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As CIO and Deputy Commissioner of the NYPD, Jim has received six awards for the Real Time Crime Center, including the Top Government Global award. Jim accepted the Computerworld Honors Program's 21st Century Achievement Award in 2006, and was recently recognized as one of Computerworld's Premier 100 IT Leaders for 2007.

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We Only Read It For the Articles

Field sales rep calls support pilot fish after his PC becomes infected with viruses and spyware. "He asked where these things come from, and in the course of our conversation, he admitted a few things," fish says. Turns out that an ex-employee who now works for a competitor is still sending e-mail to his former co-workers – including huge attachments that slow downloads to a crawl, as well as daily doses of pornography. "User said he doesn't like getting this sort of stuff usually – but it took close to six months before he actually complained," says fish. "I suspect his ex-co-worker 'friend' has inadvertently figured out how to exact revenge on us – or perhaps he just likes to share his purely artistic love of women and fine arts with the rest of the world."

Unstuck

User needs access to a workgroup application, but she can't get in. "She gave me two IDs, one for the workspace and one for the document," says a pilot fish called in to help. "The IDs looked like they were switched. I went to her desk and told her the IDs and titles didn't match unless you switched the IDs, which are both six-digit numbers. But she insisted that the workspace ID was the right one. She was very frustrated with me until she pulled out her notes to show me. Then she said, 'Oh, seems someone switched my sticky notes.' She tried it again and said, 'It works now. Thanks.' "

Who Needs 'Em?

Systems manager pilot fish is called into a meeting to review a security audit report with the auditor and the IT director – and there's a problem. "I was told that unused accounts were major security risks and that I should immediately remove all unused accounts on two dozen servers," fish says. "The user IDs on the list were cron, bin, daemon, lp, ntp, rpc and sshd – all necessary system accounts. I asked the auditor if he knew what the accounts were for and was told it didn't matter because the accounts hadn't been logged into since the server was built. I refused the request, explained the purpose of the accounts to the IT director, and left the meeting content that this was one audit I was glad to fail."

www.aha!.com

Help desk ticket comes in from a user who says that a customer can't send him e-mail. "When we asked for the undeliverable message, it said 'Cannot deliver to www.fred_smith@ourcompany.com,' " grumbles support pilot fish. "I guess the customer wanted to make sure it went over the 'Internet' line instead of the phone or cable line."

■ *Use that Interwebs thingie to send me your true tale of IT life: sharky@computerworld.com. You'll get a sharp Shark shirt if I use it.*

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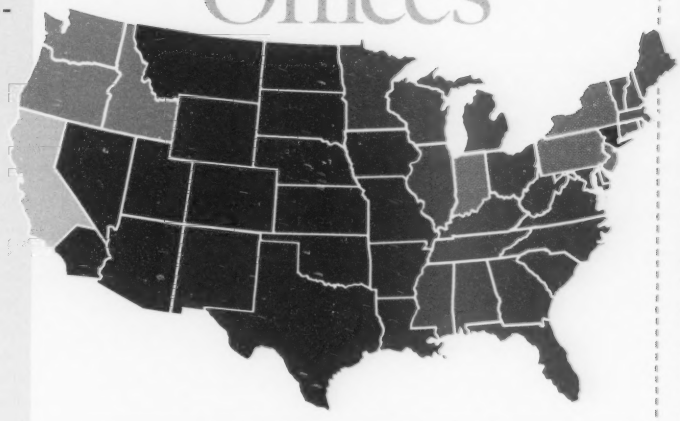

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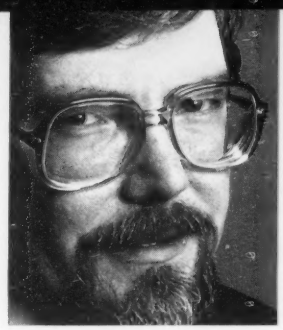

A Culture of Convenience

GOOGLE IS getting rid of its 2038 cookies. That's the year 2038, when Web browser cookies created by its Web sites over the past decade were set to expire. From now on, Google's cookies will only last for two years from the date of your last visit to a Google site.

Does that really change much for Google users? No. But it should be a warning flag for corporate IT.

Consider this: *Why* did Google cookies last until 2038? Because that was the latest they *could* expire. (The technical explanation: A cookie date is actually the number of seconds since Jan. 1, 1970, stored as a signed 32-bit integer with a maximum value of 2,147,483,647. So beyond 3:14:07 a.m. on Jan. 19, 2038, things get unpredictable.)

Google's developers didn't have to make those cookies last as long as possible. It was just more convenient to do it that way.

That's not the official explanation, of course. "We set the expiration far into the future — in 2038, to be exact — because the primary purpose of the cookie was to preserve preferences, not to let them be forgotten," wrote Google privacy guru Peter Fleischer in a blog entry last week announcing the new policy.

Well, sure. But in practical terms, a cookie that expires after two years is just as good at preserving preferences as one that lasts for decades. In fact, since users are likely to change both their preferences and their PCs over long periods of time, cookies that last practically forever aren't really that useful anyway.

No, the real reason for Google's 2038 cookies was convenience. It was just easier for developers to slap that date into every cookie.

And now, after a decade of grumbling from privacy advocates, Google is finally shifting from doing what's convenient to doing what's reasonable — and a little more secure.

Hold that thought. Now ask yourself this: How many risks are *your* IT people and users taking because those risks are convenient?

■ Like Google, you have a culture of convenience when it comes to handling data. Unlike Google, you have no one complaining about it.

How often are Social Security numbers used as unique personal identification numbers just because they're available and, well, they're unique IDs?

How often is unnecessary sensitive data downloaded to spreadsheets on user PCs because that's easier than filtering out the unneeded fields?

How often do Web developers collect customer information that may never be used because collecting it easy to do — and then store it unsafely because securing it is hard?

Chances are, you don't know. If it's happening, it's probably all going on under your radar.

Like Google, you have a culture of convenience when it comes to handling data. Unlike Google, you have no one complaining about it.

At least not until those Social Security numbers or other pieces of sensitive data end up on a stolen employee laptop or lost CD. By then, it will be too late.

But before then, changing that culture of convenience will be miserably difficult.

No one will want to change — not your overworked IT staff, and least of all your busy users. Between bad habits, longstanding traditions and simple inertia, you'll have your work cut out for you.

You'll have to get your Web developers and business analysts to stop capturing information they don't have a use for — and a safe place to store.

You'll have to require that database administrators generate unique ID numbers to go along with personal data, and that programmers create query scripts that deliver only the data users need.

And in general, you'll have to create a new culture for your IT shop — one that makes it convenient for users to handle data securely, and difficult to do what's risky.

Yes, it'll be a long, slow process. And no, it's not an emergency — yet. You don't want it to become one. So heed the warning. Get started on eliminating that insecure culture of convenience now.

After all, getting rid of 2038 cookies only took Google 10 years. ■

Frank Hayes *is* Computerworld's *senior news columnist. Contact him at frank_hayes@computerworld.com.*

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